

DARK MATTER

by
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10.10.04

Within him lay the universe's finest seed...
But since the universe was crippled, his way was tortuous.

- Meng Chiao (751-814)

CREDITS OVER:

INT. SEMINAR ROOM - DAY

Snowflakes seen through the window, defying gravity as they strive upward against a heavy grey sky.

Professor Jacob REISER, a former golden boy now in his 40's, addresses FACULTY MEMBERS seated around a conference table and GRAD STUDENTS in folding chairs against the wall.

REISER

This year's recipient of the Gelman Prize has written an ingenious paper, which is why he is now at Harvard while the rest of us continue to toil in the hinterlands. But he's welcome back any time. Ladies and gentlemen, Doctor Laurence Feng.

Violent slow-motion shots of hands applauding.

LAURENCE, late 20's, springs to his feet. He shakes hands vigorously with Reiser on his way up to the podium.

The lights flicker, then go out. Laurence places a transparency on the overhead projector. A time line showing the first three minutes of the universe, starting with the Big Bang, appears on the pull-down screen.

LAURENCE

The Reiser Model already takes us back to 10 to the minus 36 second after Big Bang, so I am pushing just a little bit closer to the initial conditions of the universe...

Laurence nods respectfully to Reiser. He changes the transparency to a schematic drawing of particles and radiation in the early universe.

LAURENCE (cont'd)

I start from the assumption that the early universe is quite lumpy...

The camera moves forward, until it is right behind Reiser's head. A loud bang, and Reiser's head whips forward. Dark blood sprays his yellow note pad, obscuring an equation.

The camera swings to Richard COLBY, 50's, and -- bang -- his glasses fly off his face.

People near the door make a run for it, screaming for help. Others dive under the conference table for cover.

The camera ducks under the table to find the acne-scarred Gary SMALL, 30's, holding hands with his girlfriend YU LIN, mid-20's.

YU LIN

Please, no!

Bang -- Small slams into Yu Lin's lap.

The camera springs back up in time to catch Laurence heading for the door. Trapped, Laurence backs into the light of the overhead projector so that the lines and dots of the transparency slide over his face.

Bang -- a bullet misses him and ricochets off the chalkboard. Bang -- Laurence's brains splatter the projection screen, adding more dots to the early universe.

EXT. CAMPUS - DAY

A graphic, high-contrast shot of a silhouetted figure walking across a quadrangle in a snow storm. The distant sound of a police siren mingles with the howling wind.

LIU XING (V.O.)

It is not the stars, but the dark matter that controls the fate of the universe. If there is not enough of it, the universe will go on expanding forever, growing colder and emptier. If there is too much of it, the universe will stop expanding, and collapse back on itself in a Big Crunch.

DISSOLVE TO:

INT. CHURCH BASEMENT - DAY

REV. HOLLINGS, 30's, reads to a group of CHINESE STUDENTS seated in a circle of metal folding chairs.

Seated together are LITTLE SQUARE, mid-20's, with a Michael Jackson-style lock of hair falling over his forehead;

WU, late 20's, with a crew cut and glasses; and between them, LIU XING, mid-20's, wiry and intense.

[NOTE: Italicized dialogue will be in Chinese with English subtitles.]

REV. HOLLINGS

But when the king came in to look at the guests, he saw there a man who had no wedding garment; and he said to the attendants, 'Bind him hand and foot, and cast him into the outer darkness; there men will weep and gnash their teeth.' For many are called, but few are chosen."

LIU XING

If God doesn't like your suit, he throws you away?

WU

God of the Designer Label.

LITTLE SQUARE

Chill out -- he's going to take us shopping.

REV. HOLLINGS

It seems pretty harsh, doesn't it, to kick somebody out of your wedding feast because he's not wearing the right clothes? But don't forget, this is a parable. It's about whether we are spiritually dressed, so to speak.

Little Square nods enthusiastically.

REV. HOLLINGS (cont'd)

You understand "parable?" In Mandarin, *yu yan*.

Hollings botches the intonation, and has translated "parable" as "stupid saying." The students smile and nod nonetheless.

JOANNA, 50, wearing a Chinese silk jacket, bubbling with excess energy, appears at the door. Hollings sees her and looks at his watch.

REV. HOLLINGS (cont'd)
 Many of you have already met this lovely lady, but for those of you who haven't, this is Joanna Silver, one of the most generous and caring people in our community.

Joanna presses her hands together and bows her head.

JOANNA
Ni hao.

REV. HOLLINGS
 She also happens to be a great patron of Chinese culture at the university. She's the Silver in the Silver Center for East Asian Studies.

JOANNA
 Well, that's quite an introduction for a volunteer driver.

REV. HOLLINGS
 Mrs. Silver has kindly offered to take a few of you over to Freshy's. How about our Three Musketeers here, Mr. Wu, Little Square, and -- sorry --

LIU XING
Liu Xing.

REV. HOLLINGS
 Liu Xing. The rest of you can ride with me in the church wagon.

EXT. CHURCH - DAY

LIU XING, LITTLE SQUARE and WU board JOANNA's black BMW. In the background the other CHINESE STUDENTS pile into the All Souls mini-van.

Little Square runs his hands over the upholstery, while Liu Xing studies the dashboard.

LITTLE SQUARE
 So soft!

JOANNA
 It's calf's leather.

LITTLE SQUARE
Feel it, Liu Xing.

LIU XING
How many miles per gallon?

JOANNA
Good question. I don't know.

WU
Oil is not a sustainable resource.

JOANNA
That's true.

Joanna starts the car, and a Bach cello concerto begins to play on the stereo.

LITTLE SQUARE
Primo sound system!

LIU XING
Bach, is it?

JOANNA
(impressed)
Yes, how did you know?

LIU XING
He is so mathematic.

JOANNA
But at times very moving.

LIU XING
To me, mathematic can be very moving.

Wu and Little Square roll their eyes.

WU
Especially square roots -- I find them so moving.

They drive off.

INT. FRESHY'S MARKET - DAY

Part supermarket part amusement park, this enormous food emporium features giant dancing chickens singing about how fresh they are, and other diversions.

REV. HOLLINGS leads a group of CHINESE STUDENTS with shopping carts down the well-stocked meat aisle.

REV. HOLLINGS

'Behold, I have made ready my dinner, my oxen and my fatted calves are killed, and everything is ready...' Remember? From today's reading?

The students are too busy making price comparisons to pay attention.

LIU XING picks up two ten pound bags of frozen chicken parts and throws it into the cart.

LITTLE SQUARE gets doused by an automatic sprinkler while contemplating a gigantic head of cabbage.

WU picks up industrial-sized bottles of soy sauce and peanut oil from the Oriental Foods section.

JOANNA gets them a container of gourmet chocolate ice cream.

They all converge at the seafood department, where a large wooden fish leaps out of a painted ocean. Liu Xing looks up at the "Fresh Fish" sign, then down at a shrink-wrapped package of cod filets.

LIU XING

In China, we buy the alive fish, then kill him at home.

JOANNA

I know. The freshest fish I ever had was in Shanghai.

LITTLE SQUARE

(picking up the package)
You just brush it with sauce and throw it in the pan. It's very convenient.

He drops the filets into their shopping cart. Wu removes them.

WU

Less tasty and less nutritious.

LITTLE SQUARE

If you want to spend an hour gutting and cleaning, and then another hour picking all the bones out of your teeth, that's your privilege. I'd rather play golf.

Little Square tries to take back the cod filets, but Wu resists.

LITTLE SQUARE (cont'd)

I'll pay for it myself!

Little Square drops the cod back into the cart.

WU

(disdainfully)

Golf.

LIU XING

Where you going to find live fish anyway? We're in Utah!

WU

I'd rather eat no fish than dead fish.

As Little Square and Wu continue to bicker, Joanna hands Liu Xing the chocolate ice cream with a five dollar bill.

JOANNA

This is my treat. Do you think Wu will approve?

LIU XING

If he doesn't, I will eat it all myself. Thank you.

At the check-out counter, Liu Xing, Wu and Little Square watch the register like hawks as the CASHIER rings them up: a twenty pound bag of rice, the chocolate ice cream, the two bags of frozen chicken parts...

LIU XING

Stop! Chicken dollar 99 cent!

CASHIER

That's thighs only.

LIU XING

Ten pound for one dollar 99 cent!

CASHIER
Thighs only.

JOANNA
I'll pay the extra.

REV. HOLLINGS
No, they need to learn.

LITTLE SQUARE rushes off with the bags of mixed parts, leaving Liu Xing face to face with the cashier. She lifts her leg above the counter.

CASHIER
This is the thigh...

WU
Go ahead, take a bite.

CASHIER
...and this is the drumstick.

LIU XING
Looks a little tough.

Little Square returns with two bags of thighs, and the cashier finishes ringing them up. Little Square and Wu push the cart, while Liu Xing hops onto the front and gets a ride out of the store. Joanna watches them and smiles.

EXT. AMPHITHEATER - DAY

LIU XING walks across a large amphitheater, where AMERICAN STUDENTS take their ease on the grassy steps. As Liu Xing beholds this little paradise, a frisbee lands at his feet.

He looks up to see a lanky blond GUY WITH EARRING waving for it. Liu Xing picks the frisbee up, examines it from an aerodynamic perspective, then throws it badly, nearly hitting a GIRL WITH BOOK.

LIU XING
Sorry!

INT. REISER'S OFFICE - DAY

LIU XING enters a large room with bound journals lining the walls and a chalkboard in the back. Seated at a desk is HILDY, 50's, Professor Reiser's no-nonsense assistant.

Liu Xing reverentially approaches the corner of the office where REISER is perched on a backless ergonomic chair, working at his computer.

HILDY

Go ahead, he won't bite.

Reiser looks up from his desk and smiles.

REISER

Ni hao, ni hao. Have a seat, Liu Xing. Am I saying it right? Sit.

Liu Xing sits at attention on the edge of a chair. While Reiser pulls a file out of his drawer, Liu Xing's eyes are drawn to an illustrated time-line of the universe, from the Big Bang to the present, on the wall behind Reiser's desk.

On an adjacent wall are numerous medals, plaques and framed diplomas.

REISER (cont'd)

Not to swell your head, but yours is the highest score in the history of the qualifying exam.

Liu Xing springs to his feet, and bows.

LIU XING

Thank you!

REISER

Please, sit. There's no need to be formal. This is America.

Liu goes back to his perch on the edge of the chair.

REISER (cont'd)

You won't be required to do any course work, so you can get right to work on your dissertation proposal. This will also give you more free time to work for me in the cosmology lab.

Liu Xing springs to his feet, and bows again.

LIU XING

It would be my great honor.

REISER

Good. Sit, sit.

Liu Xing sits back down, beaming.

REISER (cont'd)
Did you do any modelling work in Beijing?

LIU XING
Yes, but -- very basic. Computer there is very slow.

REISER
It's a bit like playing God, really. You input the initial conditions, and watch the universe unfold on your computer screen.

INT. LAB - DAY

REISER leads a bright-eyed LIU XING through a labyrinth of cubicles and computer equipment, operated by a corps of young GRADUATE STUDENTS, many of them Chinese.

REISER
We built this lab with an NSF grant two years ago, as part of my Early Universe Modelling Project. We've got fast computers...

Liu Xing stares wide-eyed at the gleaming VAXes.

REISER (cont'd)
(making a megaphone with cupped hands)
... and the best graduate students in the field. So you're in good company.

Reiser leads him to a row of six cubicles, where YU LIN, ZHANG MING, WANG YING and other GRAD STUDENTS, all mid- to late 20's, are tapping away at their computers. Taped to the wall are computer print-outs displaying dense patterns of dots.

REISER (cont'd)
Everyone, this is Liu Xing.

The other students poke their heads out from behind the partitions, then go right back to work.

Reiser steers Liu Xing into an empty cubicle, then watches him boot up the computer.

Liu Xing smiles as the word COSMO appears against an animated background of stars hurtling through space.

Reiser first puts a tall stack of computer disks on Liu's desk --

REISER (cont'd)
This is the model.

-- and then a short stack.

REISER (cont'd)
And this is the redshift data. And there you have it. Happy to have you in the group. If you have any questions, just march right on up to my office. The door is always open.

Reiser checks briefly on his other students, then leaves the lab.

Brimming with nervous energy, Liu Xing takes a green "scholar's rock," inscribed with gold-leaf calligraphy, out of his briefcase, and places it next to the computer. Then he dives into his work with zeal.

Out of the blue, a paper plane sails into his cubicle and crashes into his head. He stands up and surveys the other cubicles: everyone is tapping innocently away at their computers.

EXT. RESIDENTIAL STREET - DAY

LIU XING, LITTLE SQUARE, and WU excitedly liberate an ancient couch from a curb-side pile of furniture, books and miscellaneous appliances. They set down the couch and dust it off. It's missing one leg. Wu sits on it like a dainty Victorian.

WU
Spot of tea?

Liu Xing joins him on the couch, and they sip their pretend tea, while Little Square continues to mine the junk pile.

LITTLE SQUARE
*Some old professor must have died,
judging from all the books.*

LIU XING
Lovely house he had.

WU

Probably had the whole thing to himself. A different bathroom for each day of the week.

LIU XING

When I get a job, I'll buy a house with plenty of land. Bring my whole family over. Baba could grow vegetables in the yard.

LITTLE SQUARE

I'm going to buy an apartment building in the city. Keep the penthouse for myself, and rent out the rest. You can make millions of dollars.

WU

The People's Government made such a wise investment educating you two.

Little Square finds a battered TV set and sets it down on the couch.

LITTLE SQUARE

Check it out.

WU

It's cable-ready.

LIU XING

Come on. One, two, three.

The three roommates lift the couch and carry it off. Liu Xing starts singing "Yankee Doodle Dandy" in Chinese, and the other two join in.

INT. LIU XING'S APARTMENT - NIGHT

LIU XING sits in a torn naugahyde armchair, getting a haircut from LITTLE SQUARE. WU comes in through the window, running an illegal cable connection from the roof to the TV set.

LITTLE SQUARE

Put it back.

WU

Why?

LITTLE SQUARE

I told you, it's private property.

LIU XING

*How can electrons be private
property?*

LITTLE SQUARE

*You can ask the police on your way
to jail. American police love to
debate such questions.*

Wu turns on the TV, and the sound of a porno film comes up -- but no picture. Little Square immediately puts down his scissors, and the three room mates crowd around the set. They listen to the rhythmic grunts and moans of the actors, while Wu fiddles frantically with the tuners.

LIU XING

Picture, Wu, picture!

WU

I'm trying.

FEMALE VOICE (V.O.)

I'm coming!

LITTLE SQUARE

*Can we please just buy a new TV
set?*

WU

Relax, I can fix this.

The snowy static gives way to suggestively wavy vertical lines -- but still no picture to speak of.

MALE VOICE (V.O.)

I'm coming! I'm coming!

FEMALE VOICE (V.O.)

I'm coming again!

WU

*Okay, you're coming. You don't
have to tell the whole
neighborhood!*

Finally, the big screaming climax. Wu stops fiddling with the TV, and the three of them stand mesmerized, as the groans fade into static.

INT. BEIJING APARTMENT - NIGHT

MAMA, 45, reads a letter from Liu Xing out loud to BABA, 50, who sits on an old couch watching an American sitcom dubbed into Chinese.

MAMA

Dear Baba and Mama, The stars are shining down on your son! As an undergraduate, I remember reading about the Reiser Model. Now I have the good fortune to work for Professor Reiser himself. Under his supervision, I will make great discoveries that bring honor to our family.

The show breaks for a Kentucky Friend Chicken ("Ken-too-chee") commercial in Chinese. Baba is mesmerized.

MAMA (cont'd)

Husband, please.

BABA

I'm listening, I'm listening.

MAMA

P. S. The food is so cheap here that I am able to have meat at every meal and still save money for you, my beloved family.

Mama holds up five \$20 bills like a fan, then puts them in a jar. She begins assembling a care package for her son, including dried fruits and medicinal herbs, while Baba bathes in the glow of American TV.

BABA

When can we go? He needs you to cook and clean, so he can devote himself to his studies.

MAMA

There's no room for us. He lives with other students in a small apartment. He only gets the house after he finishes the Ph.D.

BABA

How long will it take?

MAMA

Four years, at least.

BABA

Liu Xing is twice as smart, so two years.

INT. LAB - NIGHT

LIU XING gazes intently at his computer screen. ZHANG MING and WANG YING are on their way out; everyone else is already gone.

ZHANG MING

You coming?

LIU XING

*(engrossed)**No thanks.*

Zhang Ming and Wang Ying head down the hall.

WANG YING

Still mopping floors at Pizza Hut?

ZHANG MING

Don't knock it -- it pays better than the lab. How's the nail salon?

WANG YING

My artistry is improving. I can paint American flags on all ten toenails.

ZHANG MING

The pinky toe must be a challenge.

TIME LAPSE: a series of slow dissolves as Liu Xing works alone in his cubicle, manipulating strings of symbols. Finally, Liu Xing rubs his eyes, types one last command, then watches his screen intently:

A jerky animation in which thousands of dots move chaotically outward from the center of the screen.

Liu Xing hits the print button, retrieves a dot-laden sheet of paper from the printer, and tapes it to the wall -- the latest in a series of snapshots of the unfolding universe.

REISER (O.S.)

Excellent!

Liu Xing jumps out of his skin. Over his shoulder stands REISER, smiling apologetically.

REISER (cont'd)
Sorry. When did Joseph leave?

LIU XING
I don't know. I was so --

He mimes "wrapped up in work." Reiser walks around to Joseph's computer and taps the cursor key.

REISER
What a mess. A masters degree from Cal Tech, but no self-discipline.

Reiser picks up Joseph's disks and takes them to Liu.

REISER (cont'd)
I know it's late, but would you mind finishing his runs? I need the results tomorrow.

Liu Xing gratefully accepts the new pile of disks from Reiser. He pops the first disk into the drive. As the computer reads the data, he looks up to see Reiser at the exit, giving him the thumbs-up.

TIME LAPSE: Liu Xing makes several more round trips from his cubicle, to the printer, to the wall, and back again. Finally he lays his head down on his desk.

A JANITOR empties the garbage pails and leaves.

A long close-up of Liu Xing's sleeping head against the animated stars on his computer screen.

Suddenly:

WANG YING
*Arise, comrades, and join us as we
build a bright future for China!*

Liu Xing looks up to see ZHANG MING and WANG YING in fresh clothes, doing a parody of the Maoist wake-up broadcast. Zhang Ming provides the inspiring music, while Wang Ying speaks through cupped hands.

WANG YING (cont'd)
*Study hard, work hard, and do
better every day! One, two, three,
four...*

They begin stretching exercises, with their faces contorted in pain. Liu Xing smiles, then looks at his watch.

LIU XING

Shit!

Liu Xing races to the wall, pulls down the sheets he taped in the night and places them neatly in a manila folder. He smooths his hair and races out the door.

INT. MAIN ATRIUM - DAY

LIU XING rushes across the atrium, past a group of UNDERGRADS, and stops short at the entrance to Reiser's office.

INT. REISER'S OFFICE - DAY

HILDY looks up from her desk at LIU XING's hair, which is defying gravity. Liu Xing tries to smooth it down, but it springs back up. He holds up the manila folder.

LIU XING

I give this most urgently for
Professor Reiser.

HILDY

It's okay Liu Xing, there's still
time.

LIU XING

He need it for article deadline.

HILDY

The journal doesn't close until
Thursday afternoon.

LIU XING

Are you sure?

REISER

Finished, Liu Xing?

Professor Reiser stands at the door, coffee in hand.

Liu Xing bows, hands Reiser the manila folder, then follows him to his desk. He stands watching Reiser's face as he examines the pattern of dots.

REISER (cont'd)

This is excellent work. It took God seven days to create the universe, but you did it in just one night.

He pats Liu Xing on the back, then sits down, motioning for Liu to sit as well.

REISER (cont'd)

Let me share something with you. There's a small but significant chorus of voices saying that the model is in trouble. I feel quite certain they're wrong, but I've got to prove it.

He glances over his shoulder at three shelves full of computer disks.

REISER (cont'd)

There's an Early Universe Symposium this spring in New York. Frankly, I had given up on crunching all this new data in time for that. But with you on board, it's looking eminently possible.

Liu Xing looks up at the shelves of computer disks, and calculates the time commitment in his head.

REISER (cont'd)

It's a lot of work, but you'll get to go to the conference. Have you been to New York?

LIU XING

No.

REISER

Ah, you're in for a treat. The hotel is right in Times Square. Broadway shows. Gourmet food.
(megaphone)
Beautiful high-strung women.

Hildy rolls her eyes.

LIU XING

I will do it.

REISER

Great. I'll have Hildy draw up a schedule.

He pulls down a stack of disks and hands them to Liu Xing.

REISER (cont'd)

You can start with these.

Reiser gives Liu Xing two thumbs up. Liu Xing does the same, nearly dropping the disks. He puts the disks in his briefcase, bows and leaves.

REISER (cont'd)

Good luck!

Reiser and Hildy both watch him go.

HILDY

I see many all-nighters in his future. Perhaps an all-monther.

REISER

I didn't force him.

HILDY

You don't have to. Your wish is his command.

REISER

Did you see the eager look on his face? These kids are grateful for every bit of work I give them. They come from a place where astrology is considered a science, and toilets are considered a luxury.

HILDY

Jake, they have two thousand years of culture on us. Most of them think we're the barbarians. Have you ever been to China?

REISER

I'm a theorist, dear. I don't have to actually go there.

INT. JOANNA'S HOUSE - NIGHT

In a well-equipped kitchen with an eating area, JOANNA prepares dinner, while HERB leafs through the Financial Times.

HERB

Don't you think one ticket-taker is enough? How many people do you think will actually come to this thing?

JOANNA

A lot. There's a huge number of new Chinese students this year, and hopefully plenty of people like us...

HERB

Include me out, as my father used to say.

JOANNA

Herb.

HERB

I'd be happy to pay for five ticket-takers if you want them.

JOANNA

It's not just about writing checks. Your presence is important. You're the big patron. Everyone will fawn on you.

HERB

It's just not how I want to spend my Saturday night, taking tickets and getting fawned on.

JOANNA

The lion dancers are coming all the way from Salt Lake City.

HERB

I've seen a hundred lion dancers in Shanghai. I don't need to see the Salt Lake City lion dancers.

She brings food and wine to the dining room table, within view of Herb.

JOANNA

For god's sake Herb, it's the Chinese New Year. If there was one day in the whole year to try and connect with their community, this is it. Come on you old grey bear, it'll be fun. Dinner's ready.

HERB

(coming to the table)

What is this need you have to connect all the time? I'm tired of connecting. I'm connected out.

He eats, continuing to read his financial pages.

INT. AUDITORIUM - NIGHT

JOANNA stands on the stage of a large auditorium, speaking into a microphone on a stand. Seated behind her is a band of CHINESE MUSICIANS with traditional instruments.

The audience is seated in segregated clusters of CHINESE STUDENTS, WHITE PROFESSORS, and JOANNA'S FRIENDS.

JOANNA

Next, we're very lucky to have with us Zhou Long, a former star of the Beijing Opera. He's going to perform the Monkey King's aria from *Journey to the West*, which is a classic story from the 16th century. The Monkey King's journey is a wonderful metaphor for human spiritual development -- from the mischievous little monkey in all of us, all the way up to Buddha-hood or Enlightenment.

The sound of a MARCHING BAND can be heard through the back door of the auditorium. Joanna speaks louder.

JOANNA (cont'd)

In this scene, the Monkey King, who is up in heaven for a visit, gets drunk on the forbidden wine of longevity, eats the forbidden peaches of immortality, and then -- all hell breaks loose. Ladies and gentlemen, Zhou Long as the Monkey King.

She sees several younger members of the audience head for the exit.

JOANNA (cont'd)

And after this will be the lion
dance, and then Chinese dumplings
courtesy of Panda Garden, so please
stick around!

Joanna leaves the stage to ZHOU LONG, the transplanted Chinese opera star, decked out in a bright silk costume and an elaborate monkey mask.

Outside, the marching band gives way to the sound of a raucous PEP RALLY. Joanna runs to the back of the auditorium and closes the doors. She then goes to the sound board and boosts the performer's volume.

Zhou Long commands the stage, belting out the aria, and tossing the monkey's magic rod with the agility of a high school twirler. Joanna takes her seat and savors the performance, proud to have brought a little Chinese culture to Canyon State College.

INT. LIU XING'S APARTMENT - SAME NIGHT

LIU XING chops cabbage, while WU throws shrimp in a sizzling wok. From the living room, the sound of a party in its early stages.

WU

*There is no American cuisine. The
hamburger is presumably from
Hamburg, Germany. Pizza, we all
know, was invented in China, then
ripped off by Marco Polo...*

Meanwhile LITTLE SQUARE fills two big bowls with tortilla chips, then two smaller bowls with store-bought salsa.

WU (cont'd)

What's that?

LIU XING

American cuisine.

WU

*But I'm cooking. You'll ruin
people's appetite.*

The buzzer rings.

LIU XING
I'll get it.

Liu Xing leaves the kitchen. Little Square starts to take the chips and salsa out.

WU
Wait a minute.

Wu sniffs suspiciously at the salsa, dips the corner of a chip in it, takes a bite, then spits it out.

WU (cont'd)
Go ahead -- they'll never eat it.

Little Square brings the salsa out into the living room, where party decorations hang from the walls and ceiling. The air is thick with cigarette smoke, conversation and laughter.

There are lots of CHINESE STUDENTS, and a few WHITE FACULTY members. REISER is surrounded by a small coterie of students.

At the door, Liu Xing greets JOANNA, carrying a bottle of champagne, and HERB, carrying three pans of leftover dumplings from Joanna's Chinese cultural evening.

JOANNA
Ni hao! Liu Xing, this is my husband Herb. And these are the leftover dumplings from the concert. Herb, would you take them to the kitchen? You should have come -- it was great!

LIU XING
I'm so sorry -- I had to work.

HERB
(sotto voce)
It's okay, I didn't go either.

JOANNA
Well you both missed a great show.

Little Square steps in to take the dumplings from Herb, and the champagne from Joanna, leaving Liu Xing free to talk with them.

JOANNA (cont'd)
I've been hearing things on the grapevine, Liu Xing.
 (MORE)

JOANNA (cont'd)
 They say you are the top student in
 the department.

(to Herb)

Liu Xing is part of this elite
 cosmology group, unlocking the
 secrets of the universe.

HERB

Well, that sounds very glamorous.

JOANNA

Herb goes to China on business all
 the time.

HERB

Amazing place. Full of
 opportunities right now. If I were
 a young Chinese man today, I think
 I'd stay in China.

JOANNA

Not if you were a talented young
 scientist. You'd go where the best
 scientific resources are.

LIU XING

It's true. The fast computers are
 here. All the Nobel Prize winners
 are here. My field, cosmology,
 doesn't really exist in China.
 They don't believe in the Big Bang.

HERB

What do you think of American
 women?

LIU XING

Oh, American woman very beautiful.

HERB

Chinese women age better.

LIU XING

When Chinese woman get old, she
 lose all her teeth.

Joanna smiles, revealing a mouth full of gleaming teeth.

JOANNA

Xie xie, I think.

REISER joins the group, his eyes on Joanna.

LIU XING
Professor Reiser, sir. Welcome.

REISER
Hello Silvers, and congratulations
on the Center for East Asian
Studies.

JOANNA
Thanks, Jake.

REISER
And on your Chinese cultural
evening. I hear you've even taken
some of my Chinese students
shopping.

JOANNA
Well somebody has to get them out
of those cubicles of yours.

REISER
Those cubicles are where great
scientists are incubated. This one
here, for example.

Reiser puts his hand on Liu Xing's shoulder.

JOANNA
He looks fully hatched to me.
Excuse us. We have a job to do.

Joanna takes Liu Xing by the elbow and leads him away.

REISER
(to Herb)
We're hoping to move these kids out
of the basement and into a brand
new computer center. Come visit
the lab, and I'll show you the
plans.

HERB
That's really Joanna's thing. I
just write the checks.

A cork pops, and Liu Xing pours champagne into little plastic
cups, which Joanna passes out to the crowd.

She dings the empty champagne bottle with a chopstick until
the room falls silent.

JOANNA
 (stage whisper)
 The toast.

LIU XING
 First, to all of us who are so
 lucky to come to America, *Mei Guo*,
 the Beautiful Land. May we all
 have a big success here.

JOANNA
 Here, here!

ZHANG MING
Hao!

LIU XING
 Second, to all those we have left
 behind, our family and friends back
 home.

More affirmations from the crowd.

LIU XING (cont'd)
 And last not least, to our new
 American friends. *Campei!* Up the
 bottoms!

JOANNA
 Bottoms up!

Everyone laughs drains their glasses. Wu puts a videotape of
 a Chinese Variety Show in the VCR. On the screen, a BOY
 SINGER in a shimmering suit, backed up by dragon dancers,
 performs "Children of the Dragon."

BOY SINGER
*In the ancient East there is a
 dragon./ Its name is China...*

Joanna scans the group of nostalgic students watching the
 video, but Liu Xing is not among them.

BOY SINGER (cont'd)
*Under the giant dragon's wings we
 came of age--/ Black eyes, black
 hair and yellow skin...*

EXT. STUDENT HOUSING - NIGHT

LIU XING lies on his back in the small yard behind the apartment building, gazing up at a starry sky. From around a corner comes JOANNA.

JOANNA

There you are. Aren't you cold?

LIU XING

No.

She sits on a rickety picnic bench, and traces the stars with her index finger.

JOANNA

All I know is the Big Dipper... and Cassiopeia.

LIU XING

I'm looking at the dark matter.

JOANNA

The what?

LIU XING

The dark stuff around the stars.

JOANNA

You mean space?

LIU XING

It isn't all space. There's stuff we can't see, even with the most powerful telescope, but we know it's there because of gravitational effect.

She studies the space between two stars.

LIU XING (cont'd)

Imagine that the universe is a mountain range. Only the highest peaks get snow. These snowy peaks are the stars and galaxies we can see through our telescope. But these are just the tiniest part of the universe -- maybe five percent. The rest of the mountain is dark matter. 95% of the universe, dark matter. But no one pays attention to it, because they can't see it.

(MORE)

I can see LIU XING (cont'd)
 LIU XING (cont'd) I
 can use mathematics to see the
 whole dark mountain.

Bowled over by his poetry, Joanna looks at him with great admiration.

INT. INTERNATIONAL HALLWAY - DAY

A student meeting place where flags of many nations hang along the walls. LIU XING is battling LITTLE SQUARE in a game of foosball, while old WU smokes a cigarette. They're just beginners, so there's a lot of rod-spinning and random goals.

Their dialogue is punctuated with close shots of the faceless little men spinning in unison.

LITTLE SQUARE
*Academics, you can make maybe
 \$50,000 a year at the most.
 Industry is twice that -- plus
 royalties.*

LIU XING
What industry?

LITTLE SQUARE
*Pharmaceuticals. I'm going to find
 a cure for AIDS, and become a
 millionaire.*

The ball flies off the table, and Wu retrieves it.

WU
*The people's government plans to
 launch a space telescope in 1992.
 New mainframe at Beijing University
 will analyze the images. I will be
 part of the team.*

He drops the ball in the center of the table, and the furious rod-spinning resumes.

WU (cont'd)
*In a few years, American students
 will be dying to go to China for
 their Ph.D.s, and I will be their
 teacher.*

LITTLE SQUARE
And you, Liu Xing?

LIU XING

*I'm going to solve the Dark Matter
Problem, win the Nobel Prize, and
marry a nice blond girl.*

LITTLE SQUARE

Just like Reiser.

LIU XING

Reiser never won the Nobel.

Liu Xing sets the ball down in front of one of his front men.

LITTLE SQUARE

Hey, put it in the middle!

LIU XING

I just want to try something.

He moves Little Square's defenders out of the way.

LITTLE SQUARE

That's cheating!

LIU XING

*Chill out. I'm inventing a new
shot: the high-speed drill-o-matic!*

Liu Xing's wrist snaps downward, the little man somersaults sharply, and the ball careens into the goal. Liu Xing raises his arms in triumph.

EXT. MAIN STREET - DAY

LIU XING walks past a VFW karaoke bar and a gun store. He stops to look in window of the Varsity Shop, where JACKIE, a townie in her 20's, lovingly dresses a male manikin in chinos and a blue and gold varsity sweater.

After a moment, Jackie notices Liu Xing watching her. He immediately looks away. She goes back to work, tying a matching scarf around the manikin's neck, then disappears into the store.

Liu Xing looks at the fully decked-out manikin, then goes inside.

INT. VARSITY SHOP - DAY

LIU XING wanders around the store, playing the same game of eye-contact with JACKIE, as she puts more sweaters out on the shelves, sorting by size.

JACKIE
Can I help you?

LIU XING
Just looking.

He circles around again, ending up back at the sweaters.

LIU XING (cont'd)
How much is the sweater?

JACKIE
Seventy-nine dollars.

He backs away from the sweaters, then pauses in front of a stack of "Canyon State" badges at the register.

JACKIE (cont'd)
Those are five dollars a pop, if you can believe that.

LIU XING
Are you a student here?

JACKIE
No. Are you?

LIU XING
Yes. Cosmology.

JACKIE
Really? Do you get free products?

LIU XING
(confused)
No.

Another TOWNIE GIRL enters the store.

TOWNIE GIRL
Come on Jackie, it's after 5.

JACKIE
(looks at watch)
I have to close the store.

LIU XING

It was nice to meet you.

TOWNIE GIRL

Don't keep me waiting, it's Ladies
Night at the club.

JACKIE

Bye!

The townie girl raises her eyebrows at Jackie, as Liu Xing
leaves the store.

TOWNIE GIRL

Ching Tow!

JACKIE

Shhhh!

The townie girl giggles; Jackie shakes her head.

INT. REISER'S HOUSE - DAY

Seated the head of the well-polished dining table, REISER
pours coffee for his guests -- Professor COLBY, post-doc Gary
SMALL, LIU XING and JOANNA -- while Reiser's wife CLAIRE
serves up brunch.

REISER

There's a theorist and an
experimentalist on death row, and
the guard asks each of them for
their last wish. The theorist says
"I'd like to give a seminar to
present my latest theoretical
breakthrough." Then the guard asks
the experimentalist, and he says
"I'd like to be executed before the
seminar."

Colby, Small and Reiser snort with laughter, while the two
women roll their eyes. The laughter gives way to an awkward
silence in which everyone notices that LIU XING has nodded
off.

CLAIRE

So, Liu Xing, Jake tells me you are
doing marvelous work.

She passes a big helping of hot apple crumble to Joanna, who
puts it in front of Liu Xing. The smell wakes him up.

LIU XING

Sorry.

CLAIRE

Do you want to lie down in one of the bedrooms?

LIU XING

No, no. I'm fine.

He rubs his eyes briskly, probes the crumble with his fork, then decides to take a sip of coffee instead.

CLAIRE

Is there a particular topic you're most interested in?

REISER

Liu Xing has been doing outstanding work on the model.

LIU XING

I'm very interesting, interested, in the Dark Matter Problem.

CLAIRE

Sounds mysterious.

COLBY

(drunk)

Indeed, it's one of the great unsolved mysteries of astronomy.

JOANNA

Sounds like the perfect topic for an ambitious young scientist.

REISER

It's highly speculative. I'd hate to see him get bogged down this early in his career. Good topic for a post-doc, though.

SMALL

You have to walk before you can fly.

COLBY

Oh, from what I've seen, Liu Xing can already fly. The question is, whither shall he fly?

JOANNA

I just think it's so brave of these kids to come all the way from China to the canyons of Utah to pursue their scientific dreams. Compared to Beijing this is like another planet.

Reiser stands and beckons to Liu Xing, interrupting Joanna.

REISER

Excuse us. I'm going to show Liu Xing my study.

Reiser picks up his and Liu Xing's dirty plates, and holds them out to his wife. Claire's hands are already full, but Reiser doesn't seem to notice this.

CLAIRE

(glaring at the plates)
Why are you handing them to me?

REISER

Where do you want them?

CLAIRE

The sink would be nice.

Reiser exits through the swinging doors to the kitchen, with Liu Xing in tow, leaving everyone else to clean up.

CLAIRE

Where's Herb?

JOANNA

In Shanghai, making the world safe for capitalism.

INT. REISER'S STUDY - DAY

In Reiser's well-appointed study, LIU XING looks at a wall full of medals and framed certificates.

REISER shows Liu Xing a framed black-and-white photo of himself at age 24, with his former advisor, an Indian physicist in his mid-forties. Sporting the long hair and thick-framed glasses of the era, Reiser and his teacher are posed in front of a blackboard covered with equations.

REISER

That's me when I was just about your age, with my advisor, R. K.
(MORE)

Pannu. REISER (cont'd) graduated, I published a rather sharp critique of his theory of stellar evolution. It was the paper that launched my career. It's still what I'm most known for. And most regret.

LIU XING

I read this paper in China. I like it very much.

REISER

I've never gotten over the feeling that my success was at Pannu's expense. He was a very generous teacher.

LIU XING

But you have to write this for the sake of science. Surely he will understand this.

REISER

He's become one of the leading critics of my model.

LIU XING

In China, the student must never challenge the teacher. It's a big problem. No challenge, no progress.

REISER

Challenging your teacher is fine, as long as you have good timing. Do you know the joke about the Polish comedian?

Liu Xing shakes his head.

REISER (cont'd)

Never mind.

Reiser takes a bottle of single malt scotch from a cabinet, and pours two shots.

REISER (cont'd)

Now look, you have to drink this stuff slowly, okay?

They clink glasses and drink.

EXT. REISER'S HOUSE - DAY

REISER says goodbye to COLBY, SMALL, LIU XING, and JOANNA.
Joanna steers Liu Xing toward her BMW.

JOANNA
Come, I'll drive you home.

As they arrive at her BMW, Joanna hands Liu Xing the keys.

JOANNA
Better yet: you drive.

EXT. HIGHWAY - DAY

LIU XING drives JOANNA's car on the open highway.

JOANNA
You should be in fifth.

JOANNA puts her hand on top of his and guides him into fifth gear. Liu Xing accelerates and smiles.

JOANNA (cont'd)
You can go 90 in this car and not
feel it at all.

Liu Xing zooms to 90. His face is flushed, and his eyes gleaming. Joanna smiles, happy that he's enjoying himself, but a bit nervous about the speed.

INT. HOTEL BALLROOM - NIGHT

The ceiling has been covered with a detailed dayglow map of the heavens. COSMOLOGISTS with drinks in hand mill around the room, chatting and gazing up at the starry ceiling.

A large group gathers around a make-shift stage where JERRY ZAX, 40s, and SMALL, wearing sunglasses and gold chains, perform the "Dark Matter Rap."

ZAX
(rapping)
Self-gravitating disks? Uh-oh, oh-
no./ What those spirals need is a
massive halo...

SMALL

And hey, look over here, check out these observations, / Vera Rubin's optical curves of rotation, / they can provide our needed confirmation...

REISER leads LIU XING into the fray. He tactfully points out PANNU, 60s, and John WHITEHEAD, 70s, in a small group of scientists a few yards away.

REISER

There's Pannu, my old teacher, and John Whitehead. He's on the NSF panel reviewing our grant.

Reiser takes Liu Xing by the arm and advances.

PANNU

Is it Reiser himself, or merely a model?

REISER

Hello R.K., hello John. This is my student Liu Xing, from the People's Republic.

WHITEHEAD

Ni hao!

LIU XING

You speak good Chinese.

Whitehead gives a polite smile of non-comprehension.

REISER

In ten years, he'll be giving us all a run for our money.

PANNU

In ten years, I'll be in a nursing home.

REISER

I doubt it.

WHITEHEAD

Did you hear Van Camp died? They're taking his ashes into space, on the next shuttle.

LIU XING

I'm wondering, has anyone seen
result of IMB detection for
Supernova 1987?

REISER

I keep telling him, tomorrow is for
science, tonight is for shmoozing.
John, help me out here. What's
Mandarin for "shmoozing?"

Whitehead shrugs.

REISER (cont'd)

(to Liu Xing)

The first thing you do is take this
ticket, and trade it in for a drink
at the bar.

Liu Xing walks off, embarrassed, with Reiser's voice Doppler-
shifting behind him.

REISER (O.S.) (cont'd)

So, how's the Ivy League?

PANNU (O.S.)

Vastly overrated.

At a long table set up as a bar, Liu Xing exchanges a ticket
for a scotch on the rocks. Close by, COLBY is looking up at
the ceiling and swaying a bit.

COLBY

(drunk)

When I was a kid, I knew all the
constellations. Astronomy was
something you did with a telescope.
Every star and planet had a unique
color, texture, personality. Then
along came the computer models, and
the universe became a pile of dead
numbers. Little specks of salt
from an evaporated ocean of
mystery.

LIU XING

It's funny thing. To me the number
are more interesting than the
constellation.

COLBY

Then you've come to the right
place, young man. Yes, sir. Now
get out there and start networking.

He waves his drink out toward the crowd of networking
cosmologists, and spills a little.

COLBY (cont'd)

(to Liu Xing)

And more power to you.

Liu Xing sips his scotch and watches Colby head for the door.
He approaches a group of young cosmologists, including Anu
DESAI, a young Indian woman in her 20s, talking about the job
market.

DESAI

He was the star of the department
and he got laid off.

LIU XING

Who get laid?

DESAI

(King's English)

Laid off. Fired.

LIU XING

I'm star of department, and I will
like to get laid, not fired.

The other students laugh.

INT. HOTEL BALLROOM - DAY

The same room set up for a lecture. REISER stands at a
podium with a screen behind him, speaking to a crowd of a
hundred COSMOLOGISTS on folding chairs.

On the screen is a transparency of Liu Xing's computer
simulation, with thousands of tiny dots radiating chaotically
from the center.

LIU XING watches respectfully from the back row.

REISER

And finally, neutrino decoupling,
about 1.09 seconds after the Big
Bang.

Reiser puts the last transparency on the overhead projector.

REISER (cont'd)

I'm confident that the revised model can reproduce any of the observed large-scale structures of the universe.

Applause. A hand shoots up in the back row.

REISER (cont'd)

Yes, R.K.

PANNU

I'm going to invoke the privilege of an old teacher, and chastise my former pupil. Jake, you're in denial about the data. Have you seen the latest redshift survey from the CSA?

Pannu strides up to the podium and slaps his own transparency on the projector. It shows a dense band of points surrounded by mostly empty space.

PANNU (cont'd)

Ladies and Gentlemen, this is not a model. This is reality.

Applause from the critics. Pannu circles the big empty spaces.

PANNU (cont'd)

Where are these voids in your model, Jake?

He peers over his bifocals at Reiser. Reiser hops back up on the podium and points out two tiny stray dots in one of the voids circled by Pannu.

REISER

What about these?

Pannu jabs at the larger of the two voids.

PANNU

I prefer to concentrate on this.

REISER

You always taught us to be quantitative!

PANNU

But you must also be reasonable.

ZAX stands in the middle of the audience and joins in the fray.

ZAX

I have to agree with Professor Pannu that the model is not working. One of our frailties as theorists is that we get so caught up in our computer universes that we lose touch with the observable stars and galaxies. And when that happens, we're no longer doing science, but a kind of mythology.

WHITEHEAD

Cosmology is mythology. We all know that the Big Bang can never be verified. It's a modern creation myth.

Amid audience murmurs, SMALL jumps to Reiser's defense.

SMALL

Let's back up for a minute. We have to be pragmatic. The Reiser Model may not be perfect, but it's the best one we have. If someone has a better model of the early universe, please stand up.

Liu Xing looks around the room. No one takes up Small's challenge. At the podium stands Reiser, shaken but unbowed.

EXT. HIGHWAY - DAY

LIU XING gazes out the window of a Greyhound AmeriCruiser.

LIU XING (V.O.)

Dear Baba and Mama, After attending a conference of eminent cosmologists in New York, I have decided to take a two-week tour of America.

INT. BEIJING APARTMENT, KITCHEN - NIGHT

MAMA does the dishes in a rust-stained sink, while BABA opens a box from Liu Xing. She dries her hands and joins her husband at the table, where they examine a series of American souvenirs.

Mama puts a way-too-small cowboy hat on top of Baba's head, as he puzzles over a small jar with a "genuine buffalo turd" inside.

Mama plays with a magic nudie pen from Las Vegas; she tilts it down and the show girl's dress disappears.

Baba unwraps a bobble-head President George H. W. Bush doll. They begin asking it questions.

BABA

Is Liu Xing happy in America?

He makes the doll nod: yes, yes, yes.

MAMA

Is he working hard?

Baba changes the head so it shakes: no, no, no. Mama slaps his wrist and laughs.

BABA

Will we join him soon in America?

He makes the doll nod: yes, yes, yes.

BABA (cont'd)

Mr. Yu keeps asking me when we are leaving.

MAMA

He just wants our apartment.

BABA

When does Liu Xing get the house?

MAMA

Not until he finishes the Ph.D.

BABA

Then why is he taking a vacation?

Mama finds an envelope at the bottom of the box, and opens it. It contains another two hundred dollars in American currency.

MAMA

He's a good son. Don't begrudge him a little vacation.

EXT. AMPHITHEATER - DAY

LIU XING finds REISER is deep in conversation with LAURENCE, a new student in his late 20's.

REISER

Liu Xing, welcome back! Say hello
to your countryman, Laurence Feng.

Laurence gives Liu Xing a warm smile.

REISER (cont'd)

We're creating some new codes to
make the model more responsive to
the Pannu survey. Laurence has
made a lot of progress already --
show him the last run.

Laurence pulls a transparency of dots out of his briefcase.
Liu Xing examines it.

REISER (cont'd)

Now watch this.

He nods to Laurence, who takes the Pannu transparency out of
his briefcase, and places it over the other one. It looks
like a perfect match. Liu Xing takes out his calculator, and
punches in some numbers.

LIU XING

Your voids are too empty. And
these particles -- too much energy.

Liu Xing shows them the result on his calculator.

LIU XING (cont'd)

You see? The clustering is too
efficient. The galaxies will soon
be black holes.

REISER

Okay, then what do you propose?
You can't just poke holes.

Liu Xing is taken aback by Reiser's challenge.

REISER (cont'd)

Poke holes, black holes -- it's a
joke! Put your heads together,
guys. I know you'll come up with
something.

INT. LAURENCE'S APARTMENT - NIGHT

In the nicely furnished living room, a mix of CHINESE and AMERICAN guests mingle. A body-building infomercial plays on the TV, inspiring some of the Chinese students to do goofy imitations.

LAURENCE and LIU XING are playing American chess on an antique wooden set, as JOANNA, SMALL, WU and YU LIN look on.

LAURENCE

The king moves like our general,
except he can venture out as far as
he wants. And this is the queen.
Most powerful piece on the board.

The Chinese students laugh.

LIU XING

(to Joanna)

No queen in Chinese chess.

JOANNA

Why not?

LIU XING

Chinese king have one hundred
concubines. They have no power.

CINDY (O.S.)

Honeeeeyyyyy!

LAURENCE

Excuse me, my queen calls.

Laurence scampers off to the kitchen. Joanna takes the empty seat and matches wits with Liu Xing. Intercut their game with a conversation across the room:

LITTLE SQUARE has his arm around his new American squeeze, ATHLETIC GIRLFRIEND #1, who waves away the clouds of smoke exhaled by ZHANG MING and WANG YING.

WANG YING

*I just paid \$4,000 to the lawyer
for my girlfriend's visa
application.*

ZHANG MING

*There's a Jewish guy in town who'll
do it for \$3,500, and he's smarter
too.*

LITTLE SQUARE
*Your Chinese girl will wait for
 you. Check out the local product.*

At same time, all three guys look at Little Square's American girlfriend, causing her a moment of embarrassment.

LITTLE SQUARE (cont'd)
Very good in bed, and no paperwork.

Laurence and his pregnant Chinese wife CINDY, 20s, set down two big pans of dumplings on the dining table, then make their way to an old upright piano at the end of the room. Laurence plays a florid introduction, quieting the crowd, as Cindy begins the final aria from *Madame Butterfly*.

CINDY
 (sings)
*Though you must not know it,/ for
 you alone,/ for your lovely blue
 eyes/ dies Butterfly...*

WU
*It's so stupid. Why should a
 beautiful Asian girl kill herself
 over an American sailor?*

LITTLE SQUARE
*I would like a beautiful American
 girl kill herself for love of me.*

His girlfriend gives him a look.

WU
*When she sees the size of your
 member, she will definitely kill
 herself.*

Meanwhile, Liu Xing is hiding in the hallway with a phone pressed to his ear.

JACKIE (V.O.)
 (answering machine)
*Hi, we're not in right now, but if
 you leave a message, we'll be sure
 to call you back.*

LIU XING
*Yes, hello Jackie, this Liu Xing.
 Did you get my post card? Anyway,
 I'm back in town. Maybe you like
 to have a drink or something. Call
 me. Bye.*

He looks up to see Joanna approaching.

JOANNA

Come listen. This is my favorite
aria in the whole world.

Joanna leads Liu Xing to the piano, where Cindy and Laurence approach the climax of the aria. Nearby, Small and Yu Lin stand side by side, enchanted.

CINDY

*To me you came from heaven,/ from
Paradise eternal...*

Liu Xing notices tears in Joanna's eyes.

LIU XING

Are you okay?

JOANNA

I'll be fine.

CINDY

(singing)
*Goodbye forever!/Goodbye, my
darling,/my love!*

Cindy feigns killing herself with a knife.

LAURENCE

(singing as he plays)
Butterfly! Butterfly! Butterfly!

Applause, and shouts of "Hao!" and "Bravo!" from the crowd. Laurence graciously applauds his wife before taking his own bow.

JOANNA

Have you ever seen it on stage?
It's so beautiful.

INT. LAB - NIGHT

LIU XING and LAURENCE stand shoulder to shoulder, staring at the time line of the early universe.

LIU XING

If there's dark matter, why not
dark energy? With COBE and the
supernova results, it's the most
promising solution.

LAURENCE

But that wouldn't be the Reiser
Model any more.

LIU XING

I'm working on my own model.

They go back to their cubicles. Laurence dutifully runs another simulation, while Liu Xing scribbles equations on a yellow note pad.

Unseen by them, REISER enters the lab, cradling a stack of disks, and watches his students work.

REISER

I can't tell you guys how proud I
am to have you on my team. And how
even more proud I am that you're so
engrossed in your work that you're
not hearing a word I say.

Laurence looks up and smiles, but Liu is scribbling furiously. Reiser takes a look over Laurence's shoulder at an expanding swirl of dots on the screen.

REISER (cont'd)

Good. Looks very promising.

Then he looks over Liu Xing's shoulder and frowns.

REISER (cont'd)

What's this?

LIU XING

Dark energy.

Reiser looks at Liu Xing's note pad and frowns.

REISER

But we haven't exhausted all the
possibilities for dark matter.

LIU XING

This is bigger than dark matter.
Maybe 60, 70 percent of the
universe can be dark energy.

REISER

I don't want you distracted by
this, Liu Xing. You're doing an
excellent job with the modelling
work. Stay with it.

Reiser takes half the disks and puts them on Liu Xing's desk, then gives the rest to Laurence.

REISER (cont'd)
I need these for tomorrow,
gentlemen. You can share them with
the others, but you're in charge.
It's the burden of the brightest.

INT. TEA HOUSE - DAY

The lone Chinese guy, LIU XING sips a cup of tea, nervously surveying the crowd. The TOWNIE girl is there with some friends, staring at Liu Xing.

Finally, JACKIE walks in, and with a sidelong glance at her nosy friends, sits at Liu Xing's table.

TOWNIE GIRL
Go, Jackie!

LIU XING
Will you have some tea?

JACKIE
No thanks. Um, maybe a hot
chocolate.

Liu Xing flags down the waitress.

LIU XING
Hot chocolate for my lady.

JACKIE
Your lady?

The waitress smiles and goes off for the hot chocolate.

JACKIE (cont'd)
So why did you come here?

LIU XING
To find you.

JACKIE
I mean to America.

LIU XING
To find you.

JACKIE
Seriously.

LIU XING
 Seriously, seriously. I have so
 much seriously all day.

The waitress places the hot chocolate on the table. Jackie
 blows on it.

LIU XING (cont'd)
 Wait. I'll show you galaxy in a
 cup.

He takes a nearby creamer, and holds it poised above the mug.

LIU XING
 Stir it. Faster. Now take the
 spoon away.

He pours a dot of cream in the center of the swirling
 chocolate.

INSIDE THE MUG, the whirling white blob grows spiral arms on
 the dark liquid surface. It's the cosmos in a mug. Jackie
 smiles.

JACKIE
 I figured out that cosmology has
 absolutely nothing to do with skin
 care. You study the Big Bang,
 which is supposed to be the
 beginning of the universe.

Liu Xing nods.

JACKIE (cont'd)
 I don't believe that. Because
 something had to cause the Big
 Bang. It didn't just come out of
 nothing.

LIU XING
 What do you think cause the Big
 Bang?

JACKIE
 God. I'm a Mormon, in case you're
 wondering.

LIU XING
 Then what caused God? He can't
 come out of nothing neither.

JACKIE
 Sure he can. He's eternal.

LIU XING

In my new theory, the universe is eternal. Big Bang is a major event, but not the beginning. Universe has no beginning, no end, just like God. So you see we are really the same. Universe and God is the same.

She's speechless -- both thrilled and terrified.

LIU XING

Do you like Chinese food?

JACKIE

Um, yes.

LIU XING

Then come to my apartment. I cook you dinner and a movie.

JACKIE

Sorry, I gotta go. My friends --

He watches her retreat to her girlfriends, who bombard her with questions and nervous laughter.

INT. LIU XING'S APARTMENT

LIU XING arrives home to find LITTLE SQUARE on the phone, frantically trying to get through to his family. WU sits on the couch, eyes glued to the TV.

On the screen is a bird's-eye view of tanks rolling toward Tian An Men Square, as student protestors hurl rocks and bottles.

Liu Xing immediately sits next to WU on the couch, mesmerized by the TV.

LIU XING

When did this happen?

WU

It's live.

One of the students runs out into the street, and stands defiantly in the path the first tank in the column. The tank approaches, but the boy stands his ground.

LITTLE SQUARE

Oh, my god.

Little Square puts down the phone and joins his roommates on the couch. The tank comes to a halt a few yards from the student, and one by one all the other tanks in the column stop.

LIU XING

*One student stopped a whole column
of tanks!*

The tank driver pops his head out of the hatch and argues with the student. A few people from the crowd try to pull the boy off the road, but he keeps going back.

The driver disappears back into the tank, and the begins to roll forward. He runs over the boy.

People rush out and carry the boy's limp body off the road. The column of tanks moves inexorably toward Tian An Men.

Liu Xing and Little Square have tears in their eyes. Wu is stone-faced, but clearly shaken too.

LITTLE SQUARE

*A people's government that kills
the people!*

Wu leaves the room. Little Square goes back to the phone, trying again to call his family in Beijing.

LITTLE SQUARE (cont'd)

Shit!

He slams down the phone in frustration.

LIU XING

Let me try.

Liu Xing dials his home. The call goes through. Baba's words are clipped, as he suspects his phone line is tapped.

BABA

Hello?

LIU XING

*Baba? It's Liu Xing. Are you
okay?*

BABA

I'm fine. Everything's fine.

LIU XING

Is Mama okay?

BABA
*Everybody's fine. Take care of
 yourself. No need to come home.*

EXT. JOANNA'S HOUSE - DAY

LIU XING and JOANNA stand at the garage door of her enormous Tudor-style house.

JOANNA
 It's just so shameful. It reminds
 me of Kent State in the 1960's
 Four students were killed by the
 police, here, in America.

LIU XING
 In Tian An Men is hundreds of
 students they kill.

JOANNA
 You don't have to go back there.
 You can have a brilliant career
 here, if you want to.

Joanna clicks the remote switch and the big door slides open,
 revealing not one, but two gleaming BMW's.

JOANNA (cont'd)
 Are you sure you want to do this?

LIU XING
 It's okay. I just sit and cry and
 watch TV for 24 hours. Need to get
 out.

They get into the red car and Joanna drives off, down a tree-lined street full of handsome houses.

INT. CLOTHING STORE - DAY

A high-end men's clothing store, with a coffee bar at the back. RENNY, the immaculately groomed manager, hands cups of espresso to JOANNA and LIU XING.

RENNY
 Decaf for the lady.

JOANNA
 Thank you, Renny.

As they sip their espresso, Renny shows them some shirts.

RENNY

Here's a royal blue, very strong,
fit for a king.

He holds it up under Liu Xing's face.

JOANNA

Too strong.

RENNY

Then there's this, more of a sky
blue.

JOANNA

Too blah. Do you have a deep blue,
like a midnight blue.

RENNY

I believe so. Ah!

He holds a shimmery blue-black shirt under Liu Xing's face.

JOANNA

I like it. Do you like it?

LIU XING

Uh, yes, but -- how much is it
cost?

JOANNA

Don't even think about it -- it's
my treat.

RENNY

Shall I ring it up?

Joanna hands a Gold Card to Renny, who takes it to the cash register. While they wait for approval, Liu catches a glimpse of the price, \$125.

LIU XING

My god! I really don't need that
shirt.

Renny puts the sales slip in front of Joanna and hands her a pen. She signs the slip.

JOANNA

Have you heard the expression,
"dress for success?" You're an up-
and-coming young scientist.

(MORE)

JOANNA (cont'd)
 You can't go around in second-hand clothes all the time. Right, Renny?

RENNY
 The lady has impeccable taste.

JOANNA
 Thank you, Renny.

Renny smiles, then turns his attention to ANOTHER CUSTOMER, as Joanna and Liu Xing head for the door.

JOANNA
 I guess it was very American of me to think that buying a new shirt would cheer you up. Shopping as therapy.

Liu Xing smiles reluctantly.

JOANNA (cont'd)
 I really think you'll do fine here.

LIU XING
 It was always my plan to stay in U.S. But China was always like a home inside my heart. I felt like I have two countries. But now I only have one. This is the only place I can be. I have to forget about China.

INT. LIU XING'S APARTMENT - NIGHT

LIU XING tries on his new silk shirt in a mirror, while WU brushes his teeth.

WU
Typical American idea that you need some piece of clothing or equipment before you can start your new life. The right shoes before you can take up hiking. The right shirt before you can become a scientist.

LIU XING
All the same, it's a nice shirt.

Wu feels the material, then spits into the sink.

WU
*Flimsy. Shirt should last a
 lifetime. Feel this.*

Wu offers up a piece of his khaki shirt. Liu Xing glares at him.

LIU XING
It's a Red Army shirt.

Wu shakes his head and pads off to bed, while Liu Xing lingers in front of the mirror.

EXT. STUDENT HOUSING - NIGHT

Wearing his new shirt, LIU XING sits on the rickety picnic bench under a starry sky. He lights a match from a Trump Palace Casino matchbook, and sets his Chinese passport on fire.

He watches the flame engulf the pages of his passport, then drops it abruptly and sucks his thumb. The flame dies down, and all that's left is blinking embers and the scorched photo of an eager young student bound for America.

INT. SEMINAR ROOM - DAY

At the long conference table, COLBY and REISER address the assembled physics and astronomy GRAD STUDENTS.

REISER
 On behalf of the whole faculty, I want to say to our students from China that we're outraged by the brutal crushing of student demonstrations in Beijing. We know what a blow this must be to you, and how helpless you must feel being so far away from your friends and family. Please let us know if there's anything we can do.

The Chinese students look uncomfortably at each other, and at Reiser.

COLBY
 Okay, on to the main event: dissertation proposals. The only ground rule is keep it short and sweet.

(MORE)

COBY (cont'd)
 We want the broad outline of your proposal, not all the little details. Jake, let's start with your students.

REISER

All right, this is Laurence Feng, a refugee from the University of Florida. We're happy to have him on our team.

LAURENCE, wearing a jacket and tie, chuckles obligingly. He speaks in very precise English.

LAURENCE

Thank you. For my dissertation research, I intend to develop new parameters which will allow us to extend Professor Reiser's model back in time to 10 to minus 43 second after Big Bang. Too brief?

He looks at Reiser.

REISER

Just right.

Reiser smiles at Laurence, then shifts his gaze to LIU XING, ill at ease in his blue silk shirt.

REISER (cont'd)

Next is Liu Xing, who has been working, well, very secretly on his proposal. Even I don't know what it's about, and I'm his advisor.

Laughter.

LIU XING

At present, the model does not explain large voids seen by observatory. So I've been thinking, what if the voids are not really voids after all? What if the voids are full of dark energy?

An awkward silence, in which all eyes are on Reiser.

REISER

Mr. Liu, while all of us admire your tremendous creativity, a Ph.D.

(MORE)

REISER (cont'd)
 in cosmology at Rice University
 entails rigorous practical research
 that will help us refine our
 computer model of the early
 universe.

LIU XING

It will have practical implication,
 like all theory.

REISER

That may well be true. But a Ph.D.
 is not about coming up with a
 brilliant idea and leaving the
 details to others. It's quite the
 opposite. The most successful
 Ph.D. topics are the most narrowly
 defined from the outset. God is in
 the details.

Several side conversations have broken out among the
 students.

COLBY

Listen up, folks. This is not just
 about Liu Xing. There's a lesson
 here for all of you. First, for
 your dissertation, you need to find
 a small but interesting piece of
 the puzzle we're all solving
 together. Second, you need to
 communicate with your advisor.
 Your advisor is your biggest
 supporter, and your lifeline to the
 scientific community. Understood?

The students nod.

EXT. CHURCH - DAY

From inside, the sound of a babbling infant.

INT. CHURCH - DAY

REV. HOLLINGS stands at the baptismal fount with LAURENCE,
 CINDY and their new baby, NOELLE. The congregation is full
 of FRIENDS and COLLEAGUES, including REISER, COLBY, HILDY and
 JOANNA.

HOLLINGS

Heavenly Father we commit this
child to your loving care and
protection...

Seated together near the back, LIU XING, WU, and LITTLE
SQUARE talk quietly in Chinese, excluding Little Square's
latest companion, ATHLETIC GIRLFRIEND #2.

LIU XING

They seem so happy.

LITTLE SQUARE

*It's the fastest way to get a green
card. Have a baby in this country.
The baby is an automatic citizen.*

Rev. Hollings takes the baby and bathes her in the water, as
Laurence watches prayerfully.

LIU XING

*Do you think he really believes in
the American god?*

WU

*He believe in free furniture and
free rides to the supermarket.*

LIU XING

*But he could get the free stuff
without going through all this.*

LITTLE SQUARE

Looks to me like he believes.

LIU XING

*I think he believes because it
helps him belong.*

INT. CHURCH FOYER - DAY

LIU XING and LITTLE SQUARE stand on the receiving line within
earshot of REISER, who is shaking hands with LAURENCE and
CINDY.

REISER

(to Laurence)

I read your report last night.
It's excellent. Just a few small
revisions, and it's ready for *J.*
Cosmo. I'd like to publish it in
the spring issue.

LAURENCE

Really? My god, thank you so much.
I'm so honored.

REISER

It's going to be a great
dissertation.

LITTLE SQUARE

(stage whisper)

It's going to be a great resumé.

LAURENCE

(to Cindy)

Sweetheart, great news! I'm going
to be published author!

CINDY

Really?

Cindy kisses her husband, then talks to the baby.

CINDY (cont'd)

Daddy going to be published author.

The baby squirms and gurgles.

CINDY (cont'd)

Did you see that? She understood!
I swear she understand everything!

Joanna steps up to congratulate the couple, followed by
Little Square, Wu, and Liu Xing.

LIU XING

Congratulation for publication. I
heard Professor Reiser.

LAURENCE

I'm sure you'll be next, and it
will be something much more
significant.

INT. CHURCH BASEMENT - DAY

Liu Xing heads for the food table, where he finds himself
face to face with Reiser.

REISER

Have you come up with a new
dissertation topic?

LIU XING

I'm getting some interesting result with quantum strings.

REISER

Oh, dear. They were all the rage when I was a grad student. But they didn't work out.

LIU XING

With quantum strings you have no beginning or end of time. This is something Chinese people believe for thousands of years. So you see, I can use Western science to prove Eastern wisdom!

At the other end of the food table, HOLLINGS chats with HILDY.

HOLLINGS

Do you know that over a hundred students have converted already this year? We can't keep up with all the confirmations.

HILDY

I think they really appreciate all the practical support you give them. They don't get enough of that from the university.

HOLLINGS

It's not just that. These kids come from a country that has been starved for spirituality since the communists took over.

They are interrupted by Cindy belting out "How Great Thou Art" in Chinese, as Laurence accompanies her on a badly tuned upright piano.

JOANNA approaches Liu Xing brandishing a large spoonful of potato salad.

JOANNA

Did you try the potato salad? I made it.

She puts some Liu Xing's plate, and watches him try a tiny mouthful.

JOANNA (cont'd)

You're looking thin and tired. Are you taking care of yourself?

LIU XING

Working very hard.

JOANNA

Why don't you come over for dinner tomorrow? Herb's away; I could use the company. And you need a break.

LIU XING

I have so much work.

JOANNA

Is Reiser piling it on, or is this self-imposed?

LIU XING

Both, really. He gives me a problem to work on, and it always lead to a deeper problem, one that take me past the Reiser model. I can't let these problem go. I go to sleep with it, dream about it. It kind of take over my brain.

EXT. VARSITY SHOP - DAY

The collegiate manikins are under attack by flying Cupids, in a hastily arranged tableau for Valentine's Day. Clutching a small gift box, LIU XING enters the shop.

INT. VARSITY SHOP - DAY

A girl's blond head is bowed over a pile of receipts at the cash register. LIU XING approaches with cat-like tread until he's right in front of her. He extends the present.

LIU XING

Happy Valentine!

The girls looks up, and instead of Jackie, it's the TOWNIE GIRL. Liu Xing begins backing away.

LIU XING (cont'd)

I'm so sorry. I thought you were --

TOWNIE GIRL

Jackie's off today.

LIU XING

Sorry.

He turns and heads for the door.

TOWNIE GIRL

I'm going to see her after work, in case you want me to deliver something.

Liu Xing pauses to think about it, then turns back and gives her the gift box. She smiles and stows it underneath the counter.

LIU XING

Thank you so much.

He takes one last look over his shoulder. The girl is back at work, her blond head again bowed over the counter.

As soon as Liu Xing is gone, the girl retrieves the present. She peeks inside the box at a small Chinese fan. Then she reads the note taped to the box.

"Although I come from a far away place, I feel I have know you all my life. Happy Valentine from your friend Liu Xing."

INT. LIU XING'S APARTMENT - NIGHT

LIU XING sits at the bridge table, eating a bowl of leftover noodles, deep in thought. Sex sounds come from two distinct sources: from the bedroom, where LITTLE SQUARE and ATHLETIC GIRLFRIEND #3 are going at it live; and from a porn video that WU is watching in the living room.

WU

It totally violates the principles of eroticism. Hup, hup, hup -- like a machine. A real woman would not respond to this.

Sound of the actress having her orgasm.

WU (cont'd)

See -- that's a totally fake orgasm. A true orgasm builds very slowly, deep in the woman's throat. Like this.

Wu makes a gargling sound deep in his throat. Oblivious, Liu Xing slowly stirs his noodles, then stops and gazes intently into the bowl.

INSIDE THE BOWL, ten noodles arrange themselves in a series of geometric forms.

LIU XING
*Not particles, but strings, in a
 universe of ten dimensions.*

WU
Why ten?

LIU XING
*Why four? Assume ten and the
 universe becomes very beautiful.*

Liu Xing puts down his chopsticks, and writes an equation on his note pad.

Liu Xing gets up excitedly, carrying his bowl of noodles to the bedroom door. He pounds on the door, bringing an immediate end to the lovemaking sounds.

LIU XING (cont'd)
Theoretical breakthrough!

A naked LITTLE SQUARE opens the door a crack.

LITTLE SQUARE
*Later, man. I'm in the middle of
 something.*

LIU XING
 (undeterred)
*Superstring theory allows for
 another species of matter, with its
 own set of particles and forces,
 coexisting with ordinary matter,
 interacting only through gravity.*

LITTLE SQUARE
Let me put my pants on!

Through the crack in the door, we see ATHLETIC GIRLFRIEND #3, the sheets drawn up around her and a horrified look on her face, watch Little Square leave her to look at Liu Xing's wet noodles.

LIU XING
This could be the dark matter!

INT. HALLWAY/ELEVATOR - DAY

Thrilled with his breakthrough, LIU XING chases after REISER, who is walking briskly down a hallway with HILDY at his side.

LIU XING
Professor Reiser!

Hildy hands Reiser a manuscript, and he looks it over without breaking stride.

HILDY
These are the revisions on the
Schmidt paper.

Liu Xing catches up with them, and holds up his note pad.

LIU XING
Breakthrough!

REISER
This is not a good time, Liu Xing.

Reiser hands the manuscript back to Hildy.

REISER
It's fine.

They step onto a glass elevator, as doors are closing. Liu Xing blocks the doors with his hands, and follows them in.

HILDY
Gerald Nozick has called fifteen
times about getting his name on the
inflation article.

REISER
Just tell him it's against the
policy of the journal. Period.

The elevator doors open.

HILDY
Don't forget about the ACA fund-
raiser tonight. Cocktails at 6.

Hildy peels off, and Liu Xing seizes the opportunity, thrusting his notebook into Reiser's hands. Reiser keeps walking as he peruses Liu Xing's scribbled equations.

LIU XING
Huge implication for cosmology.

REISER
(flipping page)
And epsilon is --

LIU XING
-- shadow particle, coexist with
ordinary matter, interact only
through gravity.

REISER
Tell me that again?

LIU XING
This shadow particle interact with
ordinary matter only through
gravity. Which makes it perfect
choice for the dark matter!

Liu Xing smiles proudly. Reiser is stunned.

LIU XING
Can this be my dissertation?

REISER
No. This is a lifetime's work, not
a dissertation. You're not
experienced enough to see the
difference, but I am, so you'll
have to trust me.

LIU XING
It's a major insight into the
nature of dark matter.

REISER
It may well be. But you would have
to explore it in much greater depth
to be sure.

LIU XING
I'm already getting a good result.

REISER
Liu Xing, I have no doubt that *in
time* you will make a lasting
contribution to cosmology. You
have a brilliant career ahead of
you. But I promise you, you're
going to mess it up if you go out
on a limb too early.

Reiser brusquely hands the note pad back to Liu Xing, and walks out two sets of glass doors. Liu Xing stands in the hallway, watching Reiser recede behind the two layers of glass.

LIU XING (V.O.)

Dear Baba and Mama, I am proud to report that your son has achieved a theoretical breakthrough! This will become the basis for my Ph.D. dissertation, and will bring great honor to the family...

INT. BATTING CAGE - DAY

LIU XING and LITTLE SQUARE watch WU awkwardly swing the bat as the ball from an automatic pitching machine whizzes past him.

LIU XING

I've been slaving two years for this guy, patching up his precious model with scotch tape and rubber bands. Why won't he approve my topic?

WU

Did it ever occur to you that he doesn't understand it?

LITTLE SQUARE

Strike three. My turn.

LITTLE SQUARE takes an impressive swing, but misses.

LIU XING

I work so hard, and get no recognition.

LITTLE SQUARE

Recognition will come later. Publication will come later. You need to get your degree. Just pick some easy topic to get through. Forget the big ideas.

LIU XING

This from the guy who wants to cure AIDS?

LITTLE SQUARE

But that's not my dissertation. My dissertation is to make one tiny bond between two tiny atoms on a single tiny molecule invented by my professor 10 years ago.

LIU XING

Then you're wasting your time and your talent.

Little Square hits a ground ball up the middle.

WU

But he's very good at baseball.

He hands the bat to Liu Xing, who swings wildly and misses the first pitch.

LITTLE SQUARE

Can you think of a new topic that Reiser will approve, so you can get your Ph.D. and be done with it?

LIU XING

No. I honestly can't think of anything else.

Liu Xing takes another wild swing, but this one connects, and the ball sails high into the sky.

A graphic high-contrast shot of the ball casting a dark shadow as it flies through pure white space.

LIU XING (V.O.)

Shortly after the Big Bang, the universe split into two separate parts: the normal world, and a shadow world composed of shadow particles...

INT. REISER'S OFFICE - DAY

The *Journal of Astrophysics* lands on the desk where REISER sits working. He looks up to see HILDY walking back to her desk, then looks down at the journal.

LIU XING (V.O.; CONT'D)

These two worlds cannot interact, except through the force of gravity...

Reiser's face reddens as he looks at the lead article:
"Superstrings and the Dark Matter" by Liu Xing, M.S.

REISER
The little shit!

Hildy watches Reiser's face as he scans the article.

HILDY
Are you mentioned?

REISER
He says he is "providing a new
theoretical foundation for the
Reiser Model."

HILDY
Is he?

REISER
There's a fine line between
"providing a new foundation" and
"undermining."

HILDY
He probably doesn't know that.

REISER
Why didn't you tell me he wanted to
publish?

HILDY
I didn't know. I can't read his
mind!

Reiser looks down at the article.

REISER
He should have shown it to me
first.

HILDY
He did.

REISER
He showed me a bunch of equations
on a yellow pad. And why are you
defending him?

HILDY
I'm not defending him. I just
don't believe he's out to get you.
You're his hero.

(MORE)

He wanted ~~you to~~ ^{HILDY (cont'd)} ~~test it~~. You didn't give it, so he looked elsewhere.

REISER

The timing is terrible. The NSF is looking for any reason not to fund us, and this could be the nail in the coffin. And the Silvers as you know are very fond of Liu Xing. For all I know, they'll build *him* the new lab.

HILDY

I guarantee you the Silvers do not read *J. Astro*.

REISER

He's so respectful on the surface, but deep down, he's an arrogant little bastard. Maybe they're all like that.

HILDY

Careful.

INT. JOANNA'S HOUSE - NIGHT

LIU XING and JOANNA share dinner in her spacious kitchen. Liu Xing's face is already flushed from the first glass of wine.

LIU XING

How long does Herb go away for?

JOANNA

Usually two or three weeks at a time. I don't mind it. I mean, I love Herb, but we're pretty independent.

In the silence, she pours more wine, and raises her glass.

JOANNA (cont'd)

To the published author!

They clink glasses and drink.

JOANNA (cont'd)

It's so exciting.

LIU XING

I only pray it will help me get a job.

JOANNA

Oh, I should think you'd be very much in demand now.

LIU XING

Only a few universities have this field of study, so -- not many openings.

JOANNA

If anyone qualifies, surely you do.

LIU XING

Lots of people qualifies. Job placement office tell us to consider related field, like high school teacher.

JOANNA

You, a high school teacher? Uh uh. I mean it's a lovely idea, Liu Xing, but what a terrible waste! You have a gift. You need to share that gift with the world.

Remembering something, Joanna springs out of her seat, and leaves the kitchen. She returns with a huge stack of color reprints of Liu Xing's article.

LIU XING

My god, so many.

JOANNA

We have to get the word out! I can help you do a big mailing, to all the major universities. You can stay over tonight, and we'll get to work in the morning.

LIU XING

Maybe less than twenty people in the world understand this article. I work in a universe of ten dimension. Most people have trouble with four dimension.

JOANNA

That makes it all the more exciting.

(MORE)

JOANNA (cont'd)
 And all the more important for you to stick with it! You have to have faith that people will see the value of it, even the people who don't fully understand it. Here, we can start right now. You take these into the living room, and I'll put on some coffee.

She hands Liu Xing the stack of reprints. He puts them down on the table.

LIU XING

It's very kind of you, but I have to get back to the lab.

Liu Xing stands up.

JOANNA

Now?

LIU XING

I know, it's crazy, so much work. Stuff for Reiser, plus finish the dissertation.

Joanna hands him his coat, and straightens the collar for him.

JOANNA

Just don't forget to take care of yourself. A person has to eat and sleep.

Liu Xing smiles and goes back out into the night.

INT. BEIJING APARTMENT - NIGHT

MAMA sits at a small table in her pyjamas, writing a letter under a naked light bulb. On the table is Liu Xing's latest letter, with his monthly contribution of American dollars.

BABA lies in bed, half-listening to a radio broadcast of the Beijing Opera, staring at his wife's bare ankles under the table.

MAMA (V.O.)

Dear Liu Xing, Your father and I are delighted that your research is completed, and that you are already a published author!

BABA
Come to bed!

MAMA
In a minute.

She continues writing.

MAMA (V.O.)
*Now that you have come to the end
of your studies, don't be cheap to
yourself. You need to be strong
for your examination.*

BABA
Come on!

MAMA (V.O.)
*Eat well. And do not send any more
money home. We really don't need
it. Best of luck on your
examination!*

She hears Baba snoring and looks over at the bed. He has fallen asleep on his back, with his hand on his crotch.

INT. COMPUTER SCIENCE BUILDING, BATHROOM - DAY

LIU XING splashes water on his face and hair, sprucing up in front of the large institutional mirror.

LIU XING
(into the mirror)
Therefore, shadow particles are the
ideal candidate for dark matter.

He runs his finger through his hair one last time, and walks out the door.

INT. MAIN ATRIUM - DAY

LIU XING emerges from the bathroom to see SMALL and YU LIN flirting. He sits down on a small wooden bench outside the seminar room, and organizes his transparencies.

Small gives Yu Lin a little wave, and disappears into the seminar room. Yu Lin continues down the hall, passing Liu Xing.

YU LIN
See you at the party. Good luck!

LIU XING

Thank you!

Reiser and Laurence approach, chatting amiably. Reiser goes into the seminar room, while Laurence keeps walking, pausing to give Liu Xing the thumbs up.

LAURENCE

Good luck!

Finally, COLBY pokes his head out from behind the door of the seminar room.

COLBY

Liu Xing?

Liu Xing gets up and follows Colby inside.

INT. LIU XING'S APARTMENT - DAY

WU and LITTLE SQUARE stand on chairs, hanging a home-made banner that says, in Chinese, "Congratulations, Liu Xing."

Joanna fusses over the ribbon on a gift box, while YU LIN fills plastic cups with soda for a growing crowd of CHINESE STUDENTS, including WANG YING and ZHANG MING.

WANG YING

Have you read Liu Xing's paper? I think he's a shoe-in for the Gelman Prize.

ZHANG MING

But Laurence is Reiser's favorite.

JOANNA

What do you think of my Chinese gift wrap?

LITTLE SQUARE

I think it's better than Chinese gift wrap.

Joanna smiles, then stands awkwardly listening to the students speak in Chinese, waving away the cigarette smoke.

WANG YING

Do you think Reiser gave you a good recommendation?

ZHANG MING

*Hildy said he called me "solid."
Is that good?*

YU LIN

I guess it's better than liquid.

ZHANG MING AND WANG YING

Or gas!

They make farting noises.

JOANNA

*(holding out the gift box
to Yu Lin)*

Could I leave this with you?

YU LIN

*If you really want to do Chinese
way, you have to give it directly
to the person.*

JOANNA

Thanks, I'll do that. Would ask
Liu Xing to call me?

Yu Lin nods, and escorts Joanna to the door.

INT. SEMINAR ROOM - DAY

LIU XING finishes his presentation before the tribunal of
professors, COLBY, SMALL, and REISER.

LIU XING

*Electron and shadow electron can be
near each other and not feel any
electrical force. Therefore, these
shadow particle, predict by
superstring theory, are ideal
candidate for dark matter.*

He removes the transparency, and stands nervously at the
projector while the three judges silently write notes.

REISER

*In the simulation, did you use
single- or binary-mode
computations?*

LIU XING

Single.

Small raises his eyebrows at Reiser.

SMALL

I've had enough experience with this simulation to know that even the slightest computational error -- like changing a plus sign to a minus sign -- can completely change the results.

LIU XING

Did not change plus sign to minus sign.

SMALL

It's fine for you to say that.

LIU XING

Stimulation is accurate!

COLBY

Binary mode is certainly preferable, but --

REISER

It's not just preferable, it's standard procedure.

LIU XING

Then why you never tell this to me? I do five hundred runs for your model, single-mode, and you never tell me do different.

COLBY

Excuse us for a moment.

Colby takes Reiser and Small to the other end of the room for a huddle. Liu Xing is staring down at his shoes, hearing their whispered English but unable to understand.

COLBY

You have to admit, it's a highly original piece of work.

REISER

Like all good science fiction.

COLBY

Oh, come off it, Jake. He makes a very persuasive argument.

REISER

A year ago, in this room, you gave him excellent advice on how to choose a Ph.D. topic. He ignored you. I gave him countless opportunities to change course, to find something less speculative. He ignored me. He even published the idea in a competing journal.

COLBY

So, where does this leave us?

REISER

I'm not signing off on it until he redoes the computations.

COLBY

That's a bit extreme, don't you think? It'll take him a month at least.

REISER

He's a fast worker.

COLBY

These Chinese kids are quick to feel humiliated. There's this thing in their culture about "losing face."

REISER

It seems to me that a small dose of humility is precisely what's called for.

SMALL

I agree.

COLBY

Of course you agree!

The three judges come out of their huddle.

REISER

Liu Xing, I'm afraid you're going to have to re-do your computations before we can accept the dissertation.

LIU XING

Re-do?

SMALL

Do again.

Liu Xing is devastated. He looks at Colby, who looks away.

INT. LIU XING'S APARTMENT - NIGHT (CONTINUATION)

Many of the GUESTS have gone, and more are leaving. WU smokes nervously, while LITTLE SQUARE frowns at his watch.

EXT. CAMPUS - NIGHT

LIU XING walks across the campus. AMERICAN UNDERGRADUATES are hanging out on the grass, and on the steps of buildings, enjoying the fine weather.

EXT. MAIN STREET - NIGHT

LIU XING walks slowly past the Varsity Shop, where white mannequins are decked out in caps and gowns. A sign in the window advertises "Your Graduation Day Headquarters".

EXT. VFW CLUB/KARAOKE BAR - NIGHT

LIU XING focuses intently on a game of pinball, as WU and LITTLE SQUARE try to cheer him up. At the bar behind them, LOCALS drink beer under a large American flag.

WU

*The American professors pal around
with you like everybody's equal,
but if you challenge them, god help
you.*

LIU XING

*How can a famous scientist be
afraid of a student's idea?*

LITTLE SQUARE

*Because he ran out of ideas a long
time ago. What has he done since
the Model, which he came up with --
when?*

LIU XING

1975.

LITTLE SQUARE

Thank you. The guy has no creative juice left. He's living off his work as a grad student.

LIU XING

I showed him how this will improve his model. But he can't see it.

EXT. REISER'S BACKYARD - DAY

LAURENCE and CINDY play badminton against SMALL and YU LIN, while JOANNA and COLBY watch from the sidelines.

Meanwhile, REISER serves up grilled hamburgers to a line CHINESE STUDENTS, including WANG YING, ZHANG MING, WU, and LIU XING.

REISER

Mr. Ming, headed for Miami?

ZHANG MING

New York.

REISER

Ah, Columbia -- first-rate department.

ZHANG MING

Actually, my uncle give me job in car insurance business.

REISER

Well I suppose the Big Bang is excellent training for that.

Zhang Ming takes his burger and goes. WU is next.

REISER (cont'd)

Comrade Wu, returning to China with all our scientific secrets. Surely you will be a hero of the people.

WU

No, just Vice Director of the Central Science Academy in Beijing. I will invite you to be my guest lecture.

Reiser smiles and shakes his head. Finally, Liu Xing appears.

REISER (cont'd)

Liu Xing, everything okay? How are you doing with the computations?

LIU XING

Should be done by end of the week.

REISER

That's great. You should be proud of what you did. It's a very original piece of work.

Reiser slides a hamburger onto Liu Xing's plate. Liu Xing stands staring down at the burger, as the last bits of fat drip and sizzle on the charcoal.

Colby clinks a bottle opener against a beer bottle, and everyone quiets down. Liu Xing joins Wu and LITTLE SQUARE at one picnic table, while Reiser joins Colby at another.

COLBY

I just wanted to share some good news. For the third year running, the Gelman Prize for the best science dissertation has been awarded to a student in the Physics and Astronomy Department. This year's winner is Laurence Feng.

Liu Xing is stung, but joins the applause. Claire opens a tub of home-made ice cream at one of the tables.

COLBY (cont'd)

He also happens to be starting a post-doc at Harvard this fall.

(to Laurence, over
applause)

Don't forget, you have to come back here to give the Gelman Lecture, first Tuesday in September.

LAURENCE

I'll be there.

COLBY

Finally, the news you've really been waiting for. Claire's home-made mocha fudge ice cream has reached the optimal temperature for consumption.

As everyone gathers round the ice cream, Liu Xing walks around to the front porch.

On his way, he passes the amorous Yu Lin and Small. She's sitting on his chest, feeding him bits of hamburger, which he snaps up like a dog.

Meanwhile, Joanna has a private word with Reiser.

JOANNA

That's great news for Laurence.

REISER

He's worked incredibly hard.

JOANNA

They've all worked hard. But surely Liu Xing is the most promising scientist.

REISER

He's very talented, but a bit stubborn, that one. Could care less about protocol. I have to admit, part of me admires him for it.

JOANNA

And the other part of you?

REISER

Feels sorry for him. Research is a group enterprise. A big part of it is getting the grants and building the department.

JOANNA

Do you think Liu Xing has a shot at a job?

REISER

In this climate, who knows? He's a smart guy, but not a team player.

JOANNA

Is that what you said in your letter of recommendation?

REISER

I wrote him a fine recommendation. The problem is his thesis hasn't been approved yet.

JOANNA

Will that hurt his job prospects?

REISER

So many questions!

JOANNA

I just know how important this work is to him. Can you keep him on for another term, just to buy him some time?

REISER

Our budget is way too tight.

JOANNA

Jake, I don't pretend to understand the science, but I know in my soul that if you give Liu Xing the opportunity, he's going to do something great. And when he does, it will only reflect well on you as his teacher.

Joanna finds Liu Xing on the front porch.

JOANNA

Believe me, with your credentials, something's going to come through for you.

Liu Xing looks up with a tight smile on his face.

JOANNA (cont'd)

This is for you.

Liu Xing looks up to see Joanna holding out a gift box, the one she meant to give him at his dissertation party. Inside the box is a small brass telescope.

LIU XING

Thank you so much.

JOANNA

It's an antique.

Liu Xing extends the telescope, and points it at the driveway, where Reiser and Claire are saying a protracted goodbye to Laurence and family.

JOANNA (cont'd)

Sometimes it's hard to see beyond our little world here, with all the academic politics and protocol. But there is life beyond Canyon State, believe me.

INT. LIU XING'S APARTMENT - DAY

WU is packing an entire suitcase full of cheap souvenirs for friends and family in China: an Elvis doll, bottles of shampoo and conditioner taken from a hotel room, tubs of grape jelly taken from a diner, a slew of cheap tee shirts, ten bottles of GNC fish oil pills...

A sleep-deprived LIU XING sits at the bridge table, re-doing his calculations like an accountant at tax time.

LITTLE SQUARE is running back and forth between the bedroom and living room, trying to give things away. He dangles a flashy shirt between Liu Xing and his computer. Liu Xing brushes it aside.

LITTLE SQUARE
*It's real silk. Very popular with
the ladies.*

WU
I'll take it.

LIU XING
(still working)
Why are you giving everything away?

LITTLE SQUARE
*New job, new clothes. Maybe you
can use it. Last chance...*

He slides the shirt across Liu Xing's face, but Liu stays focused on his work.

WU
I'll take it.

LITTLE SQUARE
*Sold! To the communist in the
corner!*

He hands Wu the shirt. Wu stuffs it into his suitcase, while Little Square makes another trip to the bedroom.

LITTLE SQUARE (cont'd)
*You won't want to miss this one, a
genuine Sony Walkman, complete with
headphones.*

LIU XING
You're crazy!

LITTLE SQUARE
I'm upgrading to CDs.

WU
I'll take it.

LITTLE SQUARE
I didn't ask you.

Liu Xing takes the Walkman and tries it out, while Wu struggles to zip up his bulging suitcase. Little Square helps him out by sitting on it.

Finally, the three of them relax, face to face.

WU
You finished your work?

LIU XING
Not yet.

WU
Liu Xing, I can give you a teaching job at the Central Academy. You get a one-bedroom apartment all to yourself in the nice part of Beijing.

LIU XING
Thanks, Wu, but I'm going to get a job here.

LITTLE SQUARE
Right on. You're a published author; you can do better than China. You can do better than Canyon State. You just need to get out of this dinky town.

LIU XING
Funding for cosmology is very tight. That's the problem.

LITTLE SQUARE
Fuck cosmology. You can get a nice corporate job, like me. Do your dark energy thing on the side. Even Einstein had a day job.

INT. INTERNATIONAL HALLWAY - DAY

LIU XING intercepts HILDY on her way back to the office with a cup of hot coffee.

LIU XING (cont'd)
Any new job lead?

HILDY
No, Liu Xing. I looked in all the journals -- there's nothing. It's the worst I've ever seen it.

LIU XING
What about your friend at Chicago?

HILDY
I spoke with her -- no openings. I hate to break it to you, but this country is full of Ph.D.'s who can't get a job. It's all supply and demand. You might be better off in China.

LIU XING
I decide to stay in America.

HILDY
There's no shame in going back.

LIU XING
I'm not going back.

EXT. STUDENT HOUSING - NIGHT

LIU XING sits on the back steps, reading his mail.

LIU XING
"While your credentials are certainly impressive, we believe you are over--

He laughs.

LIU XING (cont'd)
-- over-qualified to teach at the high school level."

He goes inside. Through the door we see him in silhouette, making a phone call.

JACKIE (V.O.)

Hello?

Liu Xing is silent.

JACKIE (V.O.) (cont'd)

Hello? You better stop doing this!

BOYFRIEND (V.O.)

Who is this?

Liu Xing hangs up the phone.

EXT. WEALTHY NEIGHBORHOOD - DAY

LIU XING walks through Joanna's gated community, carrying a white sample case emblazoned with the words "Skin Deep" in big red script, and smaller Chinese characters along the bottom.

LIU XING (V.O.)

*Dear Baba and Mama, How are you?
All is well in America. I'm
finishing some small revisions on
my thesis, and considering my job
possibilities. It won't be long
before our entire family can be
reunited in America, as the guest
of Professor Liu Xing. My love to
all.*

Liu Xing turns up the slate path to Joanna's house, and rings the doorbell. JOANNA opens the door with a big smile.

JOANNA

Liu Xing, what a nice surprise!
Come in!

INT. JOANNA'S HOUSE - DAY

LIU XING puts down the sample case and hands his coat to JOANNA, who hangs it in the closet. She leads him to the living room, which is furnished with an eclectic mix of modern American pieces and Chinese antiques.

JOANNA

Come, sit down. I was just making
tea. Would you like some? It's
oolong.

LIU XING

Yes, thank you.

She disappears into the kitchen. He looks at the sophisticated decor: primitive masks, abstract paintings, and an enormous Chinese wardrobe refitted as an entertainment center.

She returns with a tea tray, places it on the table, and sits next to Liu Xing on the couch.

JOANNA

So, it's been a while. How have you been? Any news?

LIU XING

News?

JOANNA

I thought maybe you heard back from one of the universities. About next year.

LIU XING

Oh, no, not yet.

Joanna notices the sample case.

JOANNA

What is "Skin Deep?"

LIU XING

Oh, that's some beauty product I sell, just to make some money in the mean time. It's pretty good stuff. You like to try it?

JOANNA

I don't think so, Liu Xing. I don't really need, I mean, I already have stuff that I like.

LIU XING

Sorry.

JOANNA

No, don't be sorry. I -- maybe I will try it. It looks interesting.

He takes a small bottle of anti-aging cream out of the sample case, and begins applying it gently to her forehead. She closes her eyes as he dabs around them, awkwardly smoothing her wrinkles with the cream.

Tears come to her eyes.

LIU XING

It's just a temporary job...

She sits up.

JOANNA

Sometimes I get allergic...

Hiding her tears, she goes to a small writing desk by the window, and takes her checkbook from the drawer. She writes him a check for \$100, and hands it to him.

LIU XING

Thank you. Thank you.

He leaves abruptly. Joanna sits on the couch and cries quietly as the room darkens.

INT. STUDENT UNION - NIGHT

Close-up of a disco ball, making it look like a celestial object. Sneak up techno music with an unnerving beat.

Pull back to reveal a new crop of CHINESE STUDENTS, talking instead of dancing. REISER and COLBY stand at the perimeter, sipping their drinks.

COLBY

If the Chinese believe the universe has no beginning, then why do they send us their best and brightest to study the Big Bang?

REISER

I guess they're finally coming around.

Sipping beer from a large plastic cup, LIU XING wanders like a ghost in the crowd, past a circle of students listening to LI BING, 20s.

LI BING

On top of it, Assistant Professor Gary Small start to give me some of his runs to do. Do you have to make time for the junior guys? I mean, Reiser's the one with the power, right?

Liu Xing wanders across the dance floor, looking at the eager faces of the new students -- one moment illuminated by the disco ball, the next moment in darkness.

Out of the blinding light of the disco ball comes HOLLINGS.

HOLLINGS

Liu Xing, I'm so glad to see you.
How's the job search? You know
we've got this new career
development circle at the church.
It's people coming together to
share their dreams, talk about
their problems, and pray together
for what they want in life. It
really works!

Liu Xing wanders off into the darkness.

HOLLINGS (cont'd)

It's Fridays at 7!

EXT. MAIN STREET - NIGHT

A light snow has begun to fall. With glazed eyes, LIU XING walks past the Varsity Shop, the Gun Store, and the Karaoke Bar.

INT. LIU XING'S APARTMENT - DAY

All the furniture is gone, except for the naugahyde chair, in which LIU XING sits uncomfortably asleep. A cardboard box of his possessions is on the floor nearby.

There's a knock on the door. Liu Xing's eyes blink open. Another knock.

LIU XING

Who is it?

LITTLE SQUARE (O.S.)

It's me.

Liu Xing doesn't budge.

LITTLE SQUARE (cont'd)

*I have five naked blond girls with
me, but I guess we'll have to come
back another day.*

Liu Xing opens the door. LITTLE SQUARE shakes the snow off his shoes, and takes a good look at his dishevelled former roommate.

LITTLE SQUARE (cont'd)
Are you okay?

LIU XING
Fine, thanks.

LITTLE SQUARE
I think you need a haircut.

He sits him back down in the armchair.

LITTLE SQUARE (cont'd)
I'll get the scissors.

LIU XING
I packed them.

Little Square rummages through the contents of the cardboard box. Inside is the VCR, the scholar's rock from his cubicle in the lab, the Skin Deep sample case, a souvenir cowboy hat, the scissors and the tube of gel.

Before returning to cut Liu Xing's hair, he notices the Chinese address on the box.

LITTLE SQUARE
*So you took old Wu up on his offer?
The job in Beijing?*

Liu Xing is silent. Little Square begins cutting his hair.

LITTLE SQUARE (cont'd)
*That's good. I hear the pay is not
bad, and you get a one-bedroom
apartment.*

All that can be heard is the snipping of the scissors, as Little Square finishes the job.

LITTLE SQUARE (cont'd)
*Anyway, you can always come back.
I'll keep my ears open for you.*

Little Square puts down the scissors and applies some gel, taking the opportunity to massage Liu Xing's scalp. Liu's facial muscles begin to relax, and tears form in his eyes.

EXT. JOANNA'S HOUSE - NIGHT

The snow continues. LIU XING walks up the slate path and knocks at the door. His jacket and shoes are soaked.

A distorted face appears behind a small frosted glass window in the door.

The door opens, and JOANNA stands there in her bathrobe.

INT. JOANNA'S HOUSE - NIGHT

Without taking off his wet jacket or closing the door behind him, LIU XING pulls open JOANNA's bathrobe and begins sucking at her breast.

They fall awkwardly onto the carpet. She helps him pull his pants down.

As he enters her, he makes a sad moaning sound. She tries to silence him the way a mother silences a crying child, by shushing him and stroking his hair.

Liu Xing lies motionless on top of her, his face pressed against her neck, crying softly. Joanna's face is strained, agitated. For both of them, this is a moment of sadness and humiliation.

Avoiding Joanna's gaze, Liu Xing picks himself up, zips up his pants, and walks out the door.

EXT. BEIJING FACTORY - DAY

As WORKERS arrive on bicycles, MAMA waits on line to present her ID to a uniformed GUARD at the factory entrance.

An argument breaks out: TWO MEN fighting over a bicycle. They have to be pulled apart by GUARDS.

She gazes up at a smokestack, and sees the smoke turn from pale grey to pitch black.

Suddenly seized with anxiety, she leaves the line, yanks her bike from a large metal rack, and rides out of the factory, nearly colliding with another worker.

INT. LIU XING'S APARTMENT - NIGHT

LIU XING makes out a check to his father for \$10,153.43. He folds it into a letter, handwritten in Chinese, which he places in an envelope.

LIU XING (V.O.)

I believe there is no justice for
the little people in this world.
Extraordinary action must be taken
to make the world a better place.

EXT. MAIN STREET - DAY

LIU XING carries the cardboard box and the letter through the snow storm.

LIU XING (V.O.)

The time has come for me to take
justice in my own hands. To right
the wrongs that have been done to
me. My favorite poem says, "In
life be a hero among men; in death
be a champion of the ghosts."

EXT. BEIJING STREET - DAY

MAMA races her bicycle down a crowded street -- going in the opposite direction of a steady stream of workers on bicycles.

LIU XING (V.O.)

Last night, I cried my heart out.
I wanted so much to bring you to
America, and to take care of you in
your old age. But the harder I try
to make a life, the more trapped I
become. Other people seem to have
all the luck.

A green-uniformed TRAFFIC POLICEMAN standing imperiously on a gazebo, watches Mama run a red light. He frowns and blows his whistle as she sails through the intersection, barely avoiding the onslaught of cars and buses.

INT. POST OFFICE - DAY

LIU XING gives the box and the letter to a POSTAL CLERK.

LIU XING (V.O.)

Please take this check of all my American savings, and deposit in your bank. This money is to repay you for the gentle care you gave me when I was a young boy.

EXT. BEIJING MARKET - DAY

MAMA rides through a crowded market, frantically ringing her bell, to get people out of the way. She brushes a wire-mesh cage full of roosters, causing the birds to squawk and tussle, and their owner to shout obscenities at her.

EXT. CAMPUS - DAY

LIU walks through a stone archway, as other students rush to classes through the heavy snow.

INT. SEMINAR ROOM - DAY

REISER addresses FACULTY MEMBERS seated around a conference table, and GRAD STUDENTS in folding chairs against the wall.

REISER

Marvin Gelman believed that science and democracy go hand in hand, that good science comes from the collision of contradictory ideas, from people trying to do better than their teachers.

He smiles at LAURENCE, who looks humbly down at the transparencies his lap.

REISER (cont'd)

Ladies and gentlemen, this year's recipient of the Gelman Prize, Doctor Laurence Feng.

Laurence springs to his feet, and shakes hands vigorously with Reiser on his way up to the podium.

Everyone applauds, except for LIU XING, who sits dripping wet in a plastic chair against the back wall. Through fogged glasses, he looks up at the clock: it's 4:05.

He pulls a vintage Smith & Wesson handgun from his pocket. Then he takes a step forward and trips over somebody's briefcase.

He gets up, points the gun shakily at the back of Reiser's head, and fires. Amid shrieks, Liu Xing swings wildly to the left and fires at Colby. Then he ducks under the conference table, and shoots SMALL, who falls into the lap of YU LIN.

On his way up, Liu Xing bangs his head on the table. Momentarily disoriented, he sees Laurence making a move for the door.

Liu Xing blocks the door, and slowly backs Laurence into the light of the projector. He fires once, missing Laurence, then again, killing him.

INT. STAIRWELL - DAY

In slow motion, bullet shells spill down institutional grey stairs. The sound of footsteps from below like sandpaper scratching wood.

Smiling up at the camera from one flight below is CINDY, carrying baby NOELLE in a backpack.

CINDY
Seminar over already?

LIU XING
I think it just finished.

CINDY
Is Laurence still up there?

LIU XING
Yes.

Liu Xing misses a step on his way downstairs and bangs into the wall on the next landing.

CINDY
Are you okay?

EXT. BEIJING LANE - DAY

MAMA rounds the corner onto her little lane, the sound of a ringing phone getting louder and higher-pitched, the light at the end of the street shifting toward the blue end of the spectrum.

EXT. CAMPUS - DAY

LIU XING strides across the empty, snow-swept campus. The distant sound of sirens mingles with the wind howling in his ears.

INT. SMALL CLASSROOM - DAY

Dripping wet, LIU XING enters the room. LI BING is working at one of the desks.

LI BING

Hey! Liu Xing, right? I read your dissertation -- it's really good!

Liu Xing takes the gun from his coat pocket.

LIU XING

Get out.

Li Bing quickly gathers up his papers and leaves the room, averting his eyes from Liu Xing.

Liu Xing drapes his wet jacket neatly over the back of a chair, sits down, and looks up at the wall clock. It's 4:59.

Liu Xing puts the gun to his temple.

EXT. BEIJING LANE - DAY

MAMA biking hard, the phone ringing loud and high, her neighbor's open window just coming into view.

INT. SMALL CLASSROOM - NIGHT

Shaking badly, LIU XING squeezes the trigger. The sound of shattering glass.

He touches his head: bleeding, but still alive. He looks up at the clock. The glass face is missing, the second hand motionless.

INT. TUNNEL - NIGHT

The sound of a heart pounding. LIU XING enters a dark tunnel with small twinkling lights inside.

Hold on the tunnel, then BANG -- one final, resounding shot, stopping the heartbeat.

ANIMATION: THE COSMOS

The perspective of an observer hurtling through space, past stars, galaxies and superclusters.

LIU XING (V.O.)

I am a scientist who believes in the conservation of matter, energy and momentum. Although my flesh-and-blood body seems dead, my spiritual soul remains perpetual and I am quantum leaping to another corner of the universe. So long, dear Mama and Baba, maybe you will meet your son in another time and another place.

EXT. BEIJING LANE - DAY

MAMA gets off her bike, reaches through her neighbor's open window, and grabs the ringing phone before her NEIGHBOR gets to it.

MAMA

Hello?

NEIGHBOR

You think you're the only one who gets calls around here?

ANIMATION

Travelling deep into the cosmos, the distances between the stars getting greater and greater, until all that's left is blackness.

MAMA (V.O.)

Hello?

CREDITS OVER:

INT. AIRPORT - NIGHT

A small baggage retrieval area, flooded with fluorescent light. LIU XING, full of promise and great expectations, sits on a plastic chair, waiting for someone to pick him up.

On the luggage carousel, a bulging brown suitcase goes around and around. In the background, an AIRPORT JANITOR sweeps the floor, looking quizzically at the Chinese boy.

In Liu Xing's lap is an unfinished aerogram written in Chinese. Full of nervous energy, he sets it aside, springs to his feet, and looks around.

Seeing no one but the janitor, he returns to his seat. He focusses on the brown suitcase going round and round.

Suddenly, the conveyor belt stops short, causing the suitcase to tumble onto the floor. Liu Xing looks up and sees the janitor at a panel of switches.

He shrugs and goes back to writing his aerogram. The sound of a switch, and the lights go out on him.

FADE OUT.