

Observe:

The story begins out of juxtaposition, existing in a temporal void; a discontinuous reality governed by the principle laws of uncertainty.

Now imagine a roller coaster...

FADE IN:

EXT. BRIGHT RED ROLLER COASTER - NIGHT

...zooms past at a phenomenal speed.

DAVID (V.O.)

Centripetal acceleration is created by an object's inertia and its resistance to change direction as it moves in a circular path, resulting in a force pushing its occupants towards the outer edges.

The coaster careens down a diving loop; its OCCUPANTS scream with excitement.

DAVID (V.O.)(CONT'D)

But without gravity, as in a black hole, the centripetal acceleration force would be created by velocity and the radius of the circular path, rather than inertia and resistance; and therefore would push the occupants towards the center of the circle.

The train of coaster cars seemingly defy gravity, approaching the first 360 degree spiral of a double helix of track.

DAVID (V.O.)(CONT'D)

And if two identical objects entered two separate loops of different circumference at the exact same moment in time, moving at the exact same speed, they would in fact experience different acceleration forces due to the diameter of the radius.

The roller coaster enters the first helix.

DAVID (V.O.)(CONT'D)

The wider the loop, the lesser the acceleration.

Into the second helix.

DAVID (V.O.)(CONT'D)
The tighter the loop, the greater
the acceleration.

Then back around.

DAVID (V.O.)(CONT'D)
And though equal in distance
traveled, our occupants would in
fact arrive at the exact same point
in space, but find themselves light
years apart.

The roller coaster streaks past.

WHOOOOOOOSH...

INTO:

INT. UNIVERSITY - LECTURE HALL - NIGHT

Seated in the audience are a scattering of university
STUDENTS and PHYSICS GEEKS.

At the front of the lecture hall stands, DR. ELLEN BERGMAN:
40's, glasses, hair pulled back in a bun, dressed molly-
conservative. A quantum physics/teaching professor, she has
entered the summation point of the first half of the
evening's lecture.

PROJECTED ON A SCREEN: a series of slide images of particle
collisions at varying velocities.

The noisy overhead projector fan whirs.

ELLEN
Only recently have we come to
realize the ordinary matter in the
universe: you, me, the planets, the
stars, the galaxies; make up less
than four percent of the entire
volume of the known observable
universe. Almost a quarter of
everything out there is invisible.

She looks up at the projected graphics, placing her glasses
on her face.

ELLEN (CONT'D)

By invisible, I mean it does not absorb, emit, or reflect within the electromagnetic or wave spectrum, making them next to impossible to detect.

Her eyes back to the audience, removing her glasses.

ELLEN (CONT'D)

Examining gravitational distortions in what appears to be empty space, and the imbalance of energy gives us a clue to its existence. Eighty percent of what is out there is only noticeable because we don't see it.

The audience, although interested, continually adjust themselves in their seats.

DR.DAVID GOLDMAN: 40's, well-dressed, appearing somewhat out of place among the other students is genuinely fascinated by her lecture.

ELLEN (CONT'D)

It is this dark energy which dominates the gravitational effects in the universe on a far larger scale than we previously imagined.

She looks to the clock on the wall; turning off the overhead projector.

The sound of the whirring fan stops, replaced by the sounds of an intermittent cough and the squeaking of chairs.

ELLEN (CONT'D)

I'll be talking more about dark energy and dark matter in the second half of this evening's lecture.

LECTURE INTERMISSION:

Everyone gets up, stretches and leaves, except for David who remains seated watching Ellen pour intensely over her notes, oblivious anyone has remained behind.

David approaches carrying a book in his hand.

DAVID
Dr Ellen Bergman?

ELLEN
Yes..?

She looks up removing her glasses.

DAVID
I just wanted to say I really
enjoyed your lecture this evening.
Putting his hand out.

ELLEN
Thank you.
She politely smiles.

DAVID
I'm Dr David Goldman.
They shake hands.

ELLEN
Are you a physicist?

DAVID
No, a medical doctor. Science is
more of a hobby. The fact is I've
been wanting to meet you for a very
long time. And I was wondering if
you would be able to join me for a
coffee after your lecture? I have
so many questions I would like to
ask.

ELLEN
I'm sorry... But I don't normally
associate with my students.

DAVID
I'm not a student - You might say
I'm more of a fan.

He looks to her and smiles.

JUMP AHEAD:

EXT. CONVENTION CENTER - NIGHT

A gala event.

Tens of THOUSANDS OF PEOPLE gather outside the convention center for an event usually reserved for the rock-star elite.

Stretched LIMOUSINES line the street.

SECURITY is high and the MEDIA in a frenzy as the who's-who of the scientific world, movie stars, dot-com billionaires, the beautiful and the elite; arrive for this black-tie, red carpet event.

SKYTRACKER SEARCHLIGHTS scan the sky.

JUMBOTRON MONITORS carry the event live throughout the grounds and the inner complex, while uplink satellite trucks broadcast every pixel around the world.

A HELICOPTER MOUNTED CAMERA zooms in on the excited crowd;

CROWD
(chanting)
ELLEN...
ELLEN...
ELLEN...
ELLEN...
ELLEN...

Carries into...

INT. CONVENTION CENTER - CONTINUOUS

...a capacity filled hall.

CROWD
(chanting)
ELLEN...
ELLEN...
ELLEN...
ELLEN...
ELLEN...

JUMBOTRON MONITORS flank either side of the convention center stage.

A mind boggling image of the Large Hadron Collider at CERN projects on a screen the width and length of the stage.

CONVENTION CENTER - STAGE - CONTINUOUS

The evening's EVENT HOST walks out onto the stage.

He looks out across the expansive CROWD, focusing in on distinguished individuals in the audience.

EVENT HOST

Good evening, ladies and gentlemen.
Distinguished scientists and
physicists. Honored guests.

Eyes to LIVE STREAMING CAMERA.

EVENT HOST (CONT'D)

And the 3 billion people around the
Globe via live streaming.

The camera pans the audience.

The crowd cheers seeing themselves up on the monitors.

EVENT HOST (CONT'D)

Time Magazine has named her Woman
of the Year. She holds 3 Advanced
Degrees in Experimental Physics.
Written numerous articles on the
Quantum Theories of Uncertainty. A
renowned lecturer. And the 2015
winner of the Nobel Peace Prize in
Physics. Please join me, as with
every great physics event, by
creating a Big Bang of our own for,
DOCTOR - ELLEN - BERGMAN.

The crowd bursts into cheers as a SPOTLIGHT follows Ellen,
'Christian Dior' from her head to her toes, onto the stage to
a thunderous applause.

CROWD

(chanting)

ELLEN...
ELLEN...
ELLEN...
ELLEN...
ELLEN...

From out in the audience an exuberant male COLLEGE STUDENT
rushes past security carrying a large CARDBOARD SIGN, handing
it to Ellen up on the stage, before security drag him away.

Ellen holds the hand written cardboard sign high above her
head to the cheers of the crowd.

The sign reads:

THE SCIENCE OF DISCOVERY
IS THE PRINCIPLE OF UNCERTAINTY

She hands the cardboard sign back to someone out in the audience.

The audience member waves the sign in the air to enthusiastic cheers.

ELLEN

Hello, everyone. My name is Dr Ellen Bergman. And I am a Quantum Physicist.

With a hearty enthusiastic wave to the audience.

The crowd again erupts with thunderous applause.

JUMBOTRON MONITORS light up with images of the L.H.C. (Large Hadron Collider) facility at CERN.

ELLEN (CONT'D)

If you look up at the monitors on either side of the stage, you will see images of the Large Hadron Collider located in the Swiss Alps near Geneva.

Images of the L.H.C. under construction project on the screens.

ELLEN (CONT'D)

At a cost of over 9 billion dollars and 30 years in the making, it lies in a man-made tunnel a staggering 27 kilometers in circumference, at a depth of more than 175 meters beneath the surface. Built by thousands of physicists and engineers, speaking dozens of languages, from dozens of countries, all coming together with a common goal; to build the most complex machine mankind has ever known. A machine which every second generates more research data than all the information contained in all the libraries of the world.

Her eyes follow to the giant monitors.

ELLEN (CONT'D)

It was here Physicists were able to confirm the existence of the elusive Higgs Particle.

Images of the HIGGS BOSON PARTICLE.

Ellen looks back out over the crowd.

ELLEN (CONT'D)

Proving we ourselves are an accident of our existence.

The audience looks on with awe at the image of a portal (wormhole) hanging suspended in mid-air...

ELLEN (CONT'D)

And although it only lasted for one billionth of a trillionth of a second, we were able to open a wormhole to another dimension.

...inside of the particle accelerator tube.

ELLEN (CONT'D)

A dimension beyond our present known fabric of time and space. But unlike a parallel universe, which exists at the same time and in a similar way, a multi-verse exists at the same time, in a similar way, while occupying the exact same space, separated only by our perception of reality. A view of reality now being brought into question.

A wave of emotional *OOOOHS* and *AAAAAHS* reverberate throughout the convention center.

SUDDENLY:

From out in the audience a MAN wearing a dark colored hoodie rushes towards the stage.

THREE GUNSHOTS:

Ring out in rapid succession: *POP! POP! POP!*

SCREAMS:

From the audience as Ellen falls to the stage floor.

SECURITY PERSONNEL AND POLICE:

Immediately tackle the armed gunman to the ground.

STAGE FLOOR - CONTINUING

Bleeding from a gunshot wound to the head; Ellen's eyes search for something to focus.

The sound of chaos rings in her ears like the SQUEALING FEEDBACK echoing across the convention center's loudspeaker PA system - *SQUEEEEEEEEEEEEEEEEEEEEEEL...*

ACROSS THE JUMBOTRON MONITORS:

Images flash across the giant monitors.

Somehow, Ellen's MEMORIES, from childhood to adult flash across the giant screens in blinding rapid succession.

FLASH!

FLASH!

FLASH!

Her entire life in a matter of seconds, playing out for all to see.

FLASH!

FLASH!

FLASH!

Becoming Slower and slower.

FLASH!

FLASH!

FLASH!

...coming to a stop at the exact moment Ellen is shot freezes and holds.

The squeal from the PA loudspeakers is replaced is by a steady pulsating: *HMMMM-MMMM-MMMM-MMMM-MMMM-MMMM-MMMM-MMMM-MMMM...*

DISSOLVE INTO:

EXT. AMUSEMENT PARK - SUMMER - DAY

The sounds of an amusement park...

EXT. BEACH - CONTINUOUS

...echoes in the background.

A barefoot YOUNG ELLEN, 14, and a YOUNG DAVID, also 14, walk along the sand.

Ellen carries her running shoes in her hand.

BEHIND THEM:

The BRIGHT RED ROLLER COASTER appears prominent over the other rides. The sound of its wheels running along the steel track reverberates in the distance.

ON THE BEACH:

A gentle surf washes across the sand.

YOUNG ELLEN

I want you to take me for a ride.

Playfully holding up two ten dollar bills.

YOUNG DAVID

I thought you didn't like roller coasters?

YOUNG ELLEN

I don't..!

Slipping on her running shoes.

YOUNG DAVID

Then why do you want me to take you for a ride?

A curious look comes across her face.