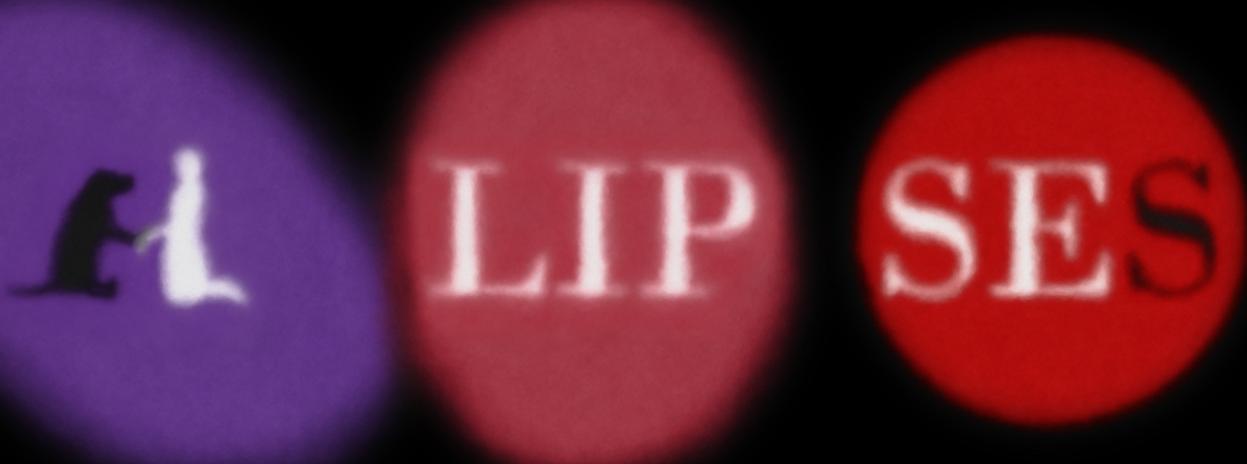


DIRECTOR'S SCRIPT



Book, Music, and Lyrics
DAVID QUANG PHAM

Narrative Dramaturgy
JORDAN ALEXANDRIA EALEY

www.ellipsesplay.com
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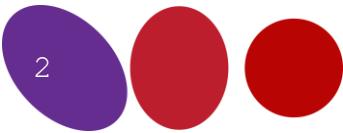
For Dr. Edwin Loh,
the Author's Longtime Instructor,
Professor of Physics and Astronomy,
Michigan State University





ELLIPSES

The Multiverse
in a Musical
by
David Quang Pham



WORKING TITLE

PLAYWRIGHTS



THANK YOU

Name	Role
Edward Brown, Laura Chomiuk, Andrea Ghez, Stephen Zepf	Professors of Physics and Astronomy
Prakash Agrawal, Neil Patel	Planets & Telescopes Partners
<u>Janelle Lawrence</u>	Musical Theatre Mentor
<u>Emily McClain</u>	First Reader
Alexis McKay	Fireworks/Stage Manager
Jordan Ealey	Hat/Dramaturg
<u>Daniela Cobb*</u>	SPT0615-JD
<u>Minka Wiltz*</u>	Singularity
<u>Vallea E. Woodbury</u>	Gravity
<u>Jason-Jamal Ligon</u>	Cartwheel
<u>Skye Passmore</u>	Whirlpool
Abby Holland	Triangulum
Daniel Sakamoto-Wengel	Andromeda
<u>Evan Phillips</u>	Milky Way
Isake Akanke, Robert Davis, Jeff Hathcoat ² , Kate Jacoby, Ebony Jerry, Tina Mitchell, Bryan Montemayor ² , Lee Osorio ² , Mary Lynn Owen, Sofia Palmero, Lau'rie Roach, Parris Sarter ² , Imani Vaughn-Jones ²	Monday Night Development Workshops Readers*



DEVELOPMENT

Date	Type	Site	Specifics
2017	Idea	Michigan State	Edwin Loh's AST 308 Galaxies and Cosmology
2020 8-15	Writing	Working Title Playwrights	Addae Moon's Master Class, "Generating Story Idea"
2020 10-5	Reading	Working Title Playwrights	Monday Night Critique Sessions #1-3
2020 11-13	Reading (Preview)	S.I.S.R!	Hosted by Michael Perrie Jr and Lacy Reily
2020 12-7	Reading	Working Title Playwrights	Monday Night Critique Sessions #17
2021 2-1	Reading	Working Title Playwrights	Monday Night Development Workshops #6-8
2021 5-3	Reading	Working Title Playwrights	Monday Night Development Workshops #12



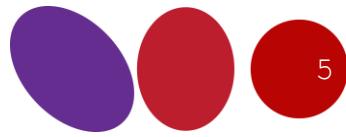
SYNOPSIS

An astrophysics epic, ELLIPSES centers on the Galaxy family and their quest to undo the Big Bang, after a member sets it off. This coming-of-age musical follows a teenager and their dog running away from home. SPT0615-JD and Gravity, a tidal force, journey to the Edge of our Universe. The story explores the Big Crunch Theory and Hubble's Law, which states that Galaxies must distance from the Center. They are human, as we want to get out. The analogy is expressed through these cosmic personifications. A dome represents the Center, the stage is space, and the fourth wall is the Edge. Our Universe is truly a family drama in play.

The teen Galaxies start their routine by scoping out the Edge ("[Bounce](#)"). Their parent calls them up for supper. Singularity nurtures them and their tidal dogs, but a child is missing at this family gathering ("[Crunch](#)"). JD is still looking out, tangentially wanting to go to the Edge ("[Cutting Edge](#)"). They see their legacy as apparent. However, Singularity speaks of its perils. Gravity fights to go outside and Singularity drags them to the doghouse. As the siblings go off to bed, JD and Milky Way speak about their growing pain ("[*](#)"). After Milky Way heads off to bed, JD hears Gravity. Gravity persuades them to check underneath the family's rug. JD finds Singularity's Big Bang Taser stashed underneath the rug, and deems the Fabric of Spacetime to be just as sturdy ("[Zilch](#)"). Later, Singularity assesses their children's black-hole hearts ("[Luminous](#)"). With this being the final straw, JD strikes their parent with the Big Bang Taser. Singularity goes lifeless. In the chaos, Gravity discreetly picks up Singularity's dislodged eye. Then, JD flees with Gravity to the Edge, but the Edge keeps distancing. It is like a rolled-up rug that JD keeps rolling away ("[Big Bang](#)").

At this start of the Universe, JD and Gravity is enjoying themselves ("[Verse](#)").

Meanwhile, the Galaxies at home mourn Singularity ("[Bounce Back](#)"). They realize they must get a move on and undo the Big Bang. As there is no longer Crunch Time, they may starve without Singularity's care and with the Universe thinning itself out. Triangulum decides to journey out to the Edge with Andromeda. Triangulum manages to convince the family to bring JD home ("[Anomaly is Everything](#)"). They instruct Cartwheel and Whirlpool to babysit Milky Way. However, Cartwheel and Whirlpool heads out as well.



Soon, Cartwheel and Whirlpool decide to return home ("[Time is Relative](#)"). They come to find that Milky Way is gone ("[Big Rip](#)"). Isolated and alone, Milky Way speaks to their planetary friends ("[Warp, Waves, and Wrinkles](#)"). Eventually, Triangulum and Andromeda find Milky Way in an exhausted state ("[Globular](#)"). The Solar System has developed into a swelling. Despite Triangulum's objections, Andromeda comes to the aid of Milky Way. As a result, Milky Way becomes a Quasar ("[Fabric](#)").

In the following act, Singularity's backstory is presented. Apparently, they ran away from their own Universe themselves ("[Heat Death](#)"). An eternity passes, and JD is lost more than ever without their scope. They have hit a wall while looking for the Edge. Gravity believes that one can overcome by relaxing ("[Parallax](#)"). In that spirit, the Edge unveils ("[Tangent](#)"). Surrounded by spectacles that reminds them of family, JD decides to head back and take the Edge with them. Gravity feels betrayed as they fought hard for the wide-open space, only for it to be a singularity again. They run away and JD is left to return home alone, with the Edge ("[..](#)"). JD soon finds that their siblings are camping out. They are caging the tidal dogs and are set to bring them home. JD frees them but is caught by their siblings ("[Far-Fetched](#)").

The Galaxies return home ("[The Scope of Things](#)"). They find that Singularity is still lifeless. Full of guilt, JD jumps off the Ellipse ("[Apparent](#)"). In these millennia of grief, Milky Way jolts Singularity back to life with the Big Bang Taser ("[Point](#)"). Singularity looks beyond the Edge to find that JD is shedding light in an Ellipse full of Galaxies. ("[Hearts in the Right Place](#)").

All of a sudden in JD's honor, Gravity returns with a wolfpack. The Galaxies and the tidal forces end time in this epic showdown ("[The Big Rip of Zenith](#)"). When all is lost, Singularity and their Galaxies pray at their table in the Center of our Universe as the tidal forces consume them ("[Big Crunch](#)"). In the darkness, a bang is seen and heard again ("[Big Bounce](#)").

The supermassive heart of the story is the Big Bang Theory and finding oneself in the nothingness, as an anomaly and a family.



CHARACTER BREAKDOWN

○ Androgyny and Astronomy ○

Character	Nature	Identity
<u>SINGULARITY</u> The relativistically impossible single parent. Singularity wants to keep the oneness of the Universe.	Super Infinite Black Hole	Adult
<u>GRAVITY</u> A tidal dog. Gravity wants to ground and free up the wide-open space.	Tidal Force	Any
<u>SPT0615-JD</u> The distant galactic sibling. JD wants to shed light and be apparent to their lightless legacy.	Embryonic Galaxy	Young Adult
<u>CARTWHEEL</u> The aerobic galactic sibling. Cartwheel wants to earn their ring.	Ring Galaxy	Teen
<u>WHIRLPOOL</u> The anaerobic galactic sibling. Whirlpool wants to spiral into enlightenment.	Grand-Design Spiral Galaxy	Teen
<u>TRIANGULUM</u> The jingoistic galactic sibling. Triangulum wants to be the role model.	Spiral Galaxy	Teen
<u>ANDROMEDA</u> The scenic galactic sibling. Andromeda wants to find the pearl in this universal oyster.	Spiral Galaxy	Teen
<u>MILKY WAY</u> The angelic galactic sibling. Milky Way wants their voice to be all it is cracked up to be.	Barred Spiral Galaxy	Preteen

Ensembles

<u>TIDALS</u>	<u>SOLAR SYSTEMS</u>	<u>MULTIPLICITIES</u>
	Sun (Singularity)	Invariant
	Earth (ensemble)	Fix
	Jupiter (Whirlpool)	Abell*
	Saturn (Cartwheel)	
	Uranus (Triangulum)	
	Eris (JD)	
	Oort Cloud (Andromeda)	

BRIGHT IDEA*

<u>ABELL 2261</u> An anomalous galactic sweetheart beyond the Edge of the Universe. Abell is JD's timely loved one in the audience. They may not have a heart or a supermassive black hole, much like the Multiplicities.	Elliptical Galaxy	Onlooker
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TIDALS

Tidals are tidal forces personified as canines. Over the course of the story, the dogs evolve into wolves.

The barks and woofs of Tidals are uttered by barking: "Force." Their howls are uttered by howling: "Fall." Singularity and most Galaxies cannot converse with the Tidals. Along JD's and Gravity's voyage to the Edge of the Universe, JD eventually understands the tidal language.

SOLAR SYSTEMS

Solar Systems are celestial bodies that speak to Milky Way when they wander the Universe alone. They are like imaginary friends, before these planetary friends physically come to life as puppets and dancers. During the first act, they speak for several billion years (quarter-hour staging time) before the Sun becomes a red giant (zit). Any set of cast members may voice the general Solar System. The principal casts are marked in parentheses for convenient doubling.

MULTIPLICITIES

Multiplicities are coupled Galaxies seated in the audience of the theatre. Invariant and Fix are Singularity's parents. Singularity was born and raised by them in another universe. In that universe, Galaxies do not have a heart and are constantly shedding light. Singularity was an anomaly there, as they hold light within their inescapable heart. Big Bang Tasers are produced by these Multiplicities, as they are laws of physics enforcers in a universe made up entirely of electricity. In "Heat Death," the Multiplicities cry out for Singularity, after Singularity runs away to our Universe.

MUSICAL NUMBERS

#	Page	Title	Characters	○Present but unvocal
1.	16	<u>Bounce</u>	SINGULARITY GALAXIES	
2.	24	<u>Crunch</u>	SINGULARITY TEEN GALAXIES JD GRAVITY tidals	
3.	25	<u>Cutting Edge</u>	GALAXIES GRAVITY SINGULARITY	
4.		*	JD MILKY WAY	
5.		<u>Zilch</u>	JD GRAVITY tidals	
6.		<u>Luminous</u>	SINGULARITY GALAXIES	
7.		<u>Big Bang</u>	SINGULARITY GALAXIES GRAVITY tidals	
8.		<u>Verse</u>	JD GRAVITY	
9.		<u>Bounce Back</u>	TEEN GALAXIES	
10.		<u>Anomaly is Everything</u>	TRIANGULUM JD	
11.		<u>Time is Relative</u>	CARTWHEEL WHIRLPOOL	
12.		<u>Big Rip</u>	CARTWHEEL WHIRLPOOL tidals SINGULARITY	
13.		<u>Warp, Waves, and Wrinkles</u>	MILKY WAY solar systems	
14.		<u>Globular</u>	ANDROMEDA TRIANGULUM	
15.		<u>Fabric</u>	TRIANGULUM ANDROMEDA MILKY WAY tidals	
16.		<u>Heat Death</u>	SINGULARITY multiplicities	
17.		<u>Parallax</u>	GRAVITY JD	
18.		<u>Tangent</u>	JD GRAVITY	
19.		...	JD	
20.		<u>Far-Fetched</u>	GRAVITY tidals JD	
21.		<u>The Scope of Things</u>	GALAXIES GRAVITY	
22.		<u>Apparent</u>	JD ABELL	
23.		<u>Point</u>	SINGULARITY TEEN GALAXIES	
24.		<u>Hearts in the Right Place</u>	SINGULARITY GALAXIES ABELL multiplicities	
25.		<u>(The Big Rip of) Zenith</u>	GRAVITY SINGULARITY TEEN GALAXIES tidals	
26.		<u>Big Crunch</u>	SINGULARITY TEEN GALAXIES tidals	
27.		<u>Big Bounce</u>	COMPANY	



MUSICAL CHARACTERIZATIONS

SINGULARITY| The hums are the longing melodies in "Heat Death":
D3-5 B2-4 C#3-5 G#2-4 E2-4 F#2-4 G#2-4 F#2-4

TRIANGULUM| Associative Instruments: Triangle, Handbell

MILKY WAY| Associative Instrument: Cowbell (may be attached to Milky Way's physicality or personality) | Diet: Eat or drink as many dairy products before the performance as one pleases. Disregard this if one is lactose intolerant.

CARTWHEEL| Associative Instruments: Jingle Ring Tambourine, Jingle Bell

ABELL| Associative Instruments: Chimes
Leitmotif from "Able" whenever Abell is focused upon. "Able" is in the second phrase in "Hearts in the Right Place".

SCENES

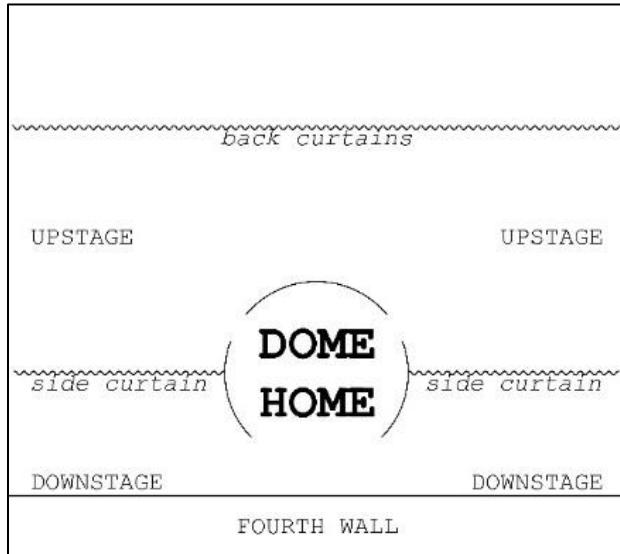
Act	Page	Location	SET props
Ii	15	The Center of the Universe	DOME HOME FIELD EQUATIONS RUG SEATS (7) TABLE balls Big Bang Taser dishes knapsack monocular snow globe whoopie cushion
Iii	61	The Fabric of Spacetime	FIELD EQUATIONS (including $f=ma$, $v=H_0 \cdot D$, $\Delta t = (\Delta t_0) / \sqrt{1 - v^2/c^2}$) knapsack monocular
Iiii	79	The Center of the Universe	DOME HOME RUG SEATS TABLE glasses on the rug Singularity's body
Iiv	81	The Fabric of Spacetime	balls eyeball knapsack magnolia flowers (2) monoculars eyeball
Iv	107	The Center of the Universe	DOME HOME RUG SEATS TABLE glasses on the rug
Iii	110	Singularity's Past Universe	DOME HOME Big Bang Taser black fabric
Iiii	120	The Fabric of Spacetime	balls eyeball knapsack
Iiiii	133	The Continuum Checkpoint	3 DOMES [left: doghouse, central: sleeping quarters, right: command post] balls board game equations ($f=ma$, $\Delta t = (\Delta t_0) / \sqrt{1 - v^2/c^2}$) knapsack snow globe whoopie cushion
Iiiv	147	The Fabric of Spacetime	FIELD EQUATIONS (including $d = 1 / p$)
Iiv	152	The Edge of the Universe	ENCHANTED AND SOFT UNIVERSE balls
Iivi	159	The Center of the Universe	DOME HOME RUG SEATS (6) TABLE Big Bang Taser dishes mirror snow globe whoopie cushion
III	184	A Fresh Universe	DOME HOME RUG SEATS TABLE balls knapsack snow globe



SETTINGS

THE CENTER OF THE UNIVERSE

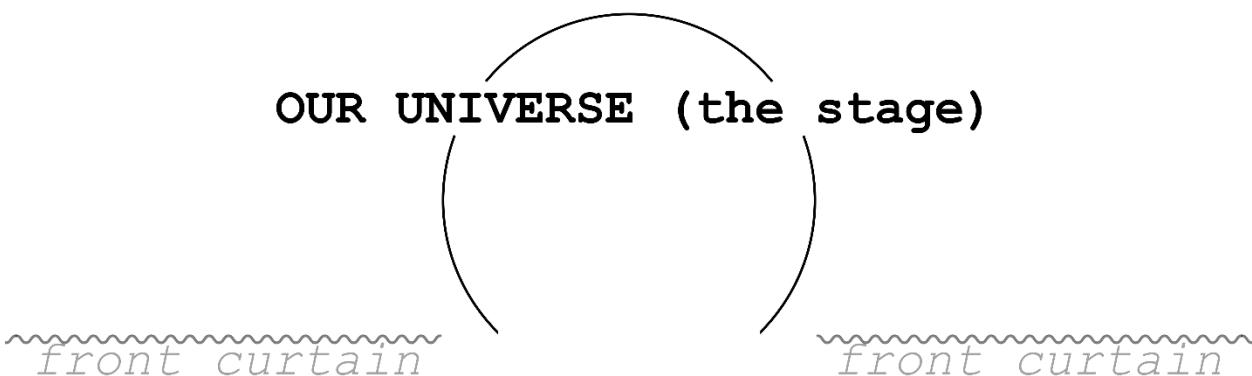
Pre-Big Bang & Big Bounce



Post-Big Bang



OUR UNIVERSE (the stage)



where JD "sheds light"

high-rise pad

landing pad

COVER

ABELL

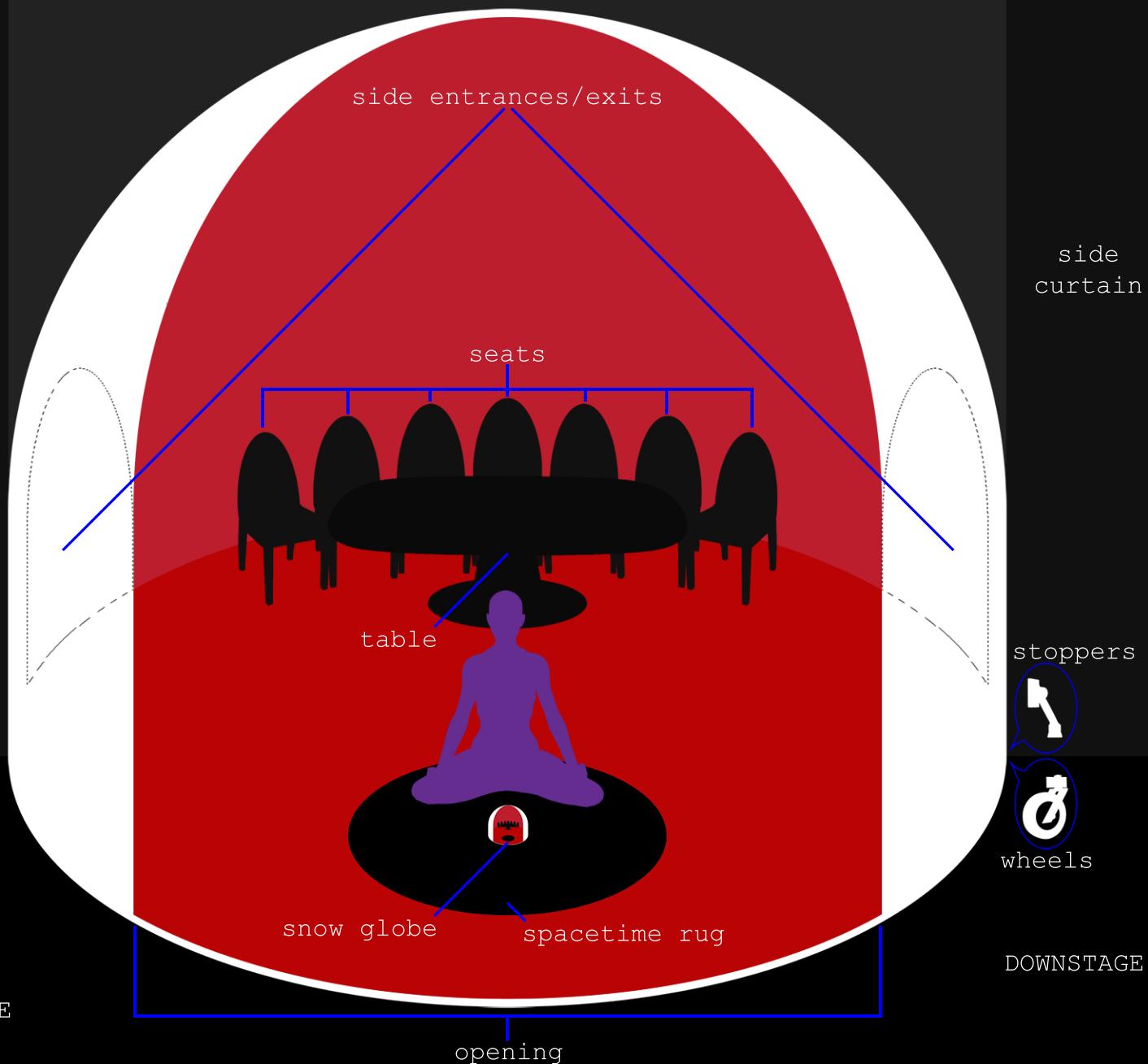
ORCHESTRA PIT

INTERDIMENSIONAL PLANE/DITCH

INVARIANT FIX Young SINGULARITY

MULTIPLICITIES' UNIVERSE
(the audience)

THE ELLIPSE / DOME HOME



THE CONTINUUM CHECKPOINT

Doghouse



Sleeping Quarters



Command Post





ACT I

[*The Center of the Universe*]

[*The Dome is positioned downstage center. There is a table with seats and a rug inside. Lights dwell solely within the home. Outside, the stage is mainly off limits. Everything upstage is concealed by the side curtains. Equations are flowers.*]

(*SINGULARITY picks equations outside the home. They place them on a dish. They head to the rug to meditate.*)

(*The MULTPLICITIES are in the audience.*)

MULTPLICITIES

Nothing.

(*Startled, SINGULARITY draws out the Big Bang Taser. They ignite it outwards.*)

(*The TIDALS distantly whimper.*)

[*The lights flicker. The side curtains ripple. Field equations loom in the space, like a field of flowers. The Universe flashes their wonder.*]

(*From the audience, ABELL enters. They sit in a front row seat.*)

(*SINGULARITY stops the Big Bang Taser.*)

[*The Universe returns to normal.*]



(*SINGULARITY stows away the Big Bang Taser underneath the rug. They look upon ABELL. They pound their chest.*)

SINGULARITY

Nothing...

(*Leaving through the side exit of the home.*)

1. BOUNCE

(*JD arrives, holding a monocular. They position themselves at the edge of the home. They look out through the monocular.*)

(*TRIANGULUM wanders out, carrying a snow globe that resembles the home. They head to JD and notice they are holding a monocular. They snatch it and look out.*)

TRIANGULUM

NOTHING.

(*Tossing the monocular.*)

(*WHIRLPOOL spirals out. They catch or pick up the monocular. They look out.*)

WHIRLPOOL

NOTHING!

(*CARTWHEEL cartwheels out. They snatch the monocular from WHIRLPOOL. They look out.*)

CARTWHEEL

NOTHING!

(*ANDROMEDA pops out.*)



(CARTWHEEL hands the monocular to ANDROMEDA.)

ANDROMEDA

NOTHING!

(*Stowing away the monocular.*)

(MILKY WAY is disheveled. They stroll in.)

MILKY WAY

NOTHIN'...

(The TEEN GALAXIES cluster in the center.)

TEEN GALAXIES

LET'S BOUNCE!

(Bouncing away from each other. They land on their respective walls. They distinctly move and dance alongside the walls of the home. In choreographic exposition, they distinctly pose at certain melodic phrases.)

(SINGULARITY remains absent.)

SINGULARITY

MILKY WAY!

(MILKY WAY lugs their way to the table.)

ANDROMEDA!

(ANDROMEDA heads to the table.)

TRIANGULUM!



(*TRIANGULUM triangulates to the table. They set the snow globe on the table.*)

SINGULARITY (cont.)

WHIRLPOOL!

(*WHIRLPOOL spirals to the table.*)

CARTWHEEL!

(*CARTWHEEL cartwheels to the table.*)

JD!

(*JD remains staring out at the Edge. They extend their arm out to ABELL.*)

JD

ABELL...

(*ABELL reaches out to JD.*)

[End of "Bounce".]

(*The TIDALS prowl in and surround the table.*)

(*SINGULARITY arrives with dishes. They bow.*)

SINGULARITY

Declinations, family. The Galaxy family. It is that time.



(*MILKY WAY hugs SINGULARITY.*)

(*The TEEN GALAXIES bow.*)

TEEN GALAXIES

Declinations, Singularity.

(*The TEEN GALAXIES sit, and TRIANGULUM unfortunately sits on the whoopie cushion.*)

(*CARTWHEEL and WHIRLPOOL hold in their laughter while MILKY WAY snickers.*)

SINGULARITY

Looks like someone enjoyed a little too much gas giants.

TRIANGULUM

Quit the snickers, Milky Way.

CARTWHEEL

The concept of time?

WHIRLPOOL

Hmm... What is time?

(*SINGULARITY places a dish on the ground.*)

(*The TIDALs feast on the dish on the ground.*)

SINGULARITY

You would know time in a timely manner, when you meditate on it. Has any of you seen two of my space telescopes lately? Where could they be? The only place it could be is in the Center of our Universe. They have to be somewhere in this Dome Home. *This Ellipse...*

(*Looking upon the snow globe.*)



TRIANGULUM

Least *nothing* is found at the Edge of our Universe, you know?

ANDROMEDA

Here, at the Center of our Universe, all we know are a bunch of asterisks, holding different pearls in their oysterous hearts. Galaxies with varying levels of brightness, shapes, and arms if they have any. Being fixed here like constellations, this glob is risky business.

(*SINGULARITY passes out the dishes.*)

SINGULARITY

There is nothing to risk but your lives if you leave this Dome. If you somehow escape my gravitational pull and step out onto the Fabric of Spacetime, you'll end up ripping apart the cosmos. Then I, the grandmaster of the Universe, will be out of order. We have all the cosmic formulas we need right here in our Center. Let's stay one big happy globular. I did what any supermassive parent would do for their little nebulae and made some grub. With my wrists and black-hole heart, I cooked you all up something special. Nuclear pasta and meteors.

CARTWHEEL

*Special for the trillionth millennium, you Bạch Hổ*¹...

SINGULARITY

This tiger nomy/mom/dad is especially happy that you're just as thrilled as the first. Our meals are heated to almost 15 million degrees Kelvin and rotated within the prototype cosmic microwave background at the angular velocity of 14.713 minus 2.396 sine squared its solar latitude minus 1.787 sine to the fourth power of its solar latitude. Strongest material in the Universe. A variety of nutrition from the crusts of neutron stars. Dismantle the mantle. But leave the core. I'd love to planet these.

¹Bạch Hổ is Vietnamese for "white tiger," sounds like "black hole," and implies tiger parenting.



(*GRAVITY tries to grab TRIANGULUM's dish.*)

(*TRIANGULUM slaps away GRAVITY.*)

TRIANGULUM

Tidal dog... That is not for you to gravitate to.

MILKY WAY

Throw the dog a meteor. If tidal force wants a swig, they can have spaghettification. Fix...?

(*GRAVITY obediently sits.*)

(*MILKY WAY tosses unseen food to GRAVITY.*)

(*GRAVITY devours the invisible spaghetti.*)

Who are good tidal forces? You all are!

(*The TIDALs wag their tails.*)

TIDALS

Force! Force! Force! Force! Force! Force! Force! Force! Force!

(*SINGULARITY tries to get the TIDALs to sit.*)

SINGULARITY

Fix. Fix. Fix. Fix. Fix. Fix. Fix. Fix.

(*WHIRLPOOL prepares to pray.*)

(*MILKY WAY dives into their dish.*)

**TRIANGULUM**

Again, Milky Way?

ANDROMEDA

Ye mostly photons, Triangulum.

CARTWHEEL

It takes eight millennia to burn that, Andromeda.

WHIRLPOOL

A simple nap ain't last any longer, Cartwheel.

SINGULARITY

Most of you went through a phase where you ate megatons of nuclear pasta. You want to go through accretion and be a Grand-Design Spiral Galaxy, don't you?

(CARTWHEEL taps WHIRLPOOL on the shoulder, mocking their physique.)

WHIRLPOOL

You may be well rounded, but you ain't got spiral arms in this fight. You're filled with heavy blue stars. Ain't it ring a bell, Ring Galaxy?

CARTWHEEL

Gal, I don't put weight or stress on myself. Y'all are the morbidly spiral Galaxies.

(ANDROMEDA points to TRIANGULUM.)

**ANDROMEDA**

Least you're not a two-dimensional square, like this Galaxy.

TRIANGULUM

I'll run faster than light circles around you, Galaxies.

(*Tossing the whoopie cushion at WHIRLPOOL.*)

(*In their seats, CARTWHEEL and WHIRLPOOL demonstrate defensive stances. They bicker.*)

MILKY WAY

(*Mouthful of nuclear pasta.*)

Kau tau to you, ellipsoids².

CARTWHEEL**WHIRLPOOL****TRIANGULUM**

Watch your worm hole, you quasi-Galaxy. Least we're not babies!

SINGULARITY

Oneness, clusters of stars! Gals. Your hearts are all vigorous.

(*Pinching MILKY WAY's cheek. This shows that MILKY WAY is SINGULARITY's favorite child.*)

Always, full of grace.

(*Preparing to pray. They place a hand on their chest. They shape that hand as though it is holding a heart. Their other hand sits flatly under their hearty hand.*)

Let us save space.

(*The nearby GALAXIES pray with SINGULARITY.*)

² In geometry, an ellipsoid is a three-dimensional ellipse. In ELLIPSES, this is like calling someone "fat."



2. CRUNCH

SINGULARITY

FEED THAT HOLE IN YOUR HEART.
GIVE INTO INTERNAL DARKNESS.
SHED OUR LIGHT FOR NO ONE.
AS IT'S CRUNCH TIME, GALAXIES.

IN BLACK HOLES, DWELL WISDOM.
FED BY THE SPRINKLES OF STARDUST.
CRUSH THEIR DREAMS IN YOUR PALM.
IT IS CRUNCH TIME, MY BABIES.

TEEN GALAXIES

CONSUME STAR SYSTEMS.
CONSUME WORLDS THAT TEEM.
CONSUMED BY THOUGHTS OF FAMILY. FAMILY...

SINGULARITY

STRING BY STRING IN THEORY.
AND FABRIC BY SPACETIME FABRIC.
HOLD OUR LOVE AS A WHOLE.
IT IS CRUNCH TIME, WE BELIEVE.

WHIRLPOOL

IT IS CRUNCH TIME, SINGULARITY.

TRIANGULUM

IT IS CRUNCH TIME, SINGULARITY.

CARTWHEEL

IT IS CRUNCH TIME, SINGULARITY.

ANDROMEDA

IT IS CRUNCH TIME, SINGULARITY.

**MILKY WAY**

IT IS CRUNCH TIME, NOMY/MOMMY/DADDY SING.

SINGULARITY

IT IS CRUNCH TIME, JD?
SPT0615-JD?

[End of "Crunch".]

(GRAVITY splits from the TIDALS. They stroll to JD, to be their canine companion.)

3. CUTTING EDGE

(JD is looking upon their Galaxy family.)

JD

NOT THE TIME
TO PUSH ME OVER THE EDGE...
CUT INTO MY—
PUSH ME OVER THE EDGE OF THE...

(GRAVITY turns JD's head to the outside.)

CENTER WITH OUR RELATIVES.
OUR TIDAL DOGS.
GRAVITY, ALWAYS GROUNDING ME.

(Nearing the edge of the home.)

YOU SEE.
I GO OFF ON A TANGENT.
WHERE THE CUTTING EDGE WILL BE...

(Longingly sighing.)

**JD (cont.)**

WHERE THE CURVATURE CONCEALS ALL WORLDS LEADING INTO
KINSHIP.

SAIL OUT OF THIS ELLIPSE.

THE
WHERE **THE** ASTRAL BEACH WILL MEET AN OCEAN FULL OF
CHORAL REEFS.
SEA WITH OTHER *ELLIPSES*³.

WHY IS THIS CIRCLE LACKING THE CURIOSITY IN ALL?
STUCK IN THIS HERE, GALA.

WHY ARE THESE OVALS⁴ BENT ON SEEING NOTHING IN MYSTERY?
LOOK BEYOND THESE GALAXIES.

TEEN GALAXIES

CUT AWAY FROM THE EDGE!

JD

WHY DON'T YOU MAKE ME?
ALL YOUR FIGHTS HAVE DRIVEN A WEDGE.
PLEASE LET ME BE AT PEACE BY THE EDGE.
GO BACK AND CIRCUMVENT.
I'LL JUST BE OUT ON A TANGENT—

(In JD's mind, the TEEN GALAXIES sound like they are droning on.)

TEEN GALAXIES

SPT0615-JD.

AS WE ARE JUST SAYING BEFORE YOU CUT US OFF.
NOTHING'S CUTTING OUTTA THE EDGE.
NO ONE'S GOING OVER THE EDGE.
JOIN US FOR CRUNCH.

³ In geometry, ellipses are ovals. In linguistics, ellipses indicate omissions. In ELLIPSES, this is a divisive term.

⁴ Being called an “oval” is like being called “slow” while being called an “ellipse” is akin to a curse word.



JD

APPARENTLY, I HAVEN'T MADE MYSELF CLEAR.
CUTTING MY EDGES MAKES MYSELF APPARENT AS YOU⁵...
AND SHEDS MY LIGHT UPON A LIGHTLESS GALAXY.
MY HEART TELLS ME THERE'S A PROMISING FAMILY, OFF—
END OF THIS TANGENT.

TEEN GALAXIES

SPT0615. CHILD.

NO NEED TO BE APPARENT— (*Droning on in JD's head.*)
JOIN US FOR CRUNCH.

JD

AN

MY FUTURE IS **AN** ELLIPSE WHERE MY LEGACY IS ABELL...
TO MEET A NICE GALAXY...

(*Letting GRAVITY ground them.*)

JD

TEEN GALAXIES

JD...

SPT0615-JADED—

JD

GOES OFF OF THE TANGENT!

ALL MY COSMIC POEMS MUST REACH TO THE ENDS OF THIS
EPIC TALE.
OUR AUDACIOUS VERSE.

THERE MIGHT BE A FRIEND WHO WILL FOLLOW IN MY
LYRICAL TRAILS
TO THE EDGE OF THE UNIVERSE...

YOU'LL KNOW.
I'LL BE CUTTING TO THE EDGE.

[End of "Cutting Edge".]

⁵ Singularity.

**GRAVITY**

Force!

JD

Grounded. You're my tidal force, Gravity...

SINGULARITY

I will spare a millennium to listen to your verse, JD. You are apparent to me. Clear and crisp like how I raised you to be.

JD

I love you too, Singularity...

SINGULARITY

Your love doesn't seem crystal clear. What speaks to your heart?

JD

Abell... There is something ringing in mine.

SINGULARITY

A bell? Your astronomical clock must be malfunctioning.

JD

My biological clock remains malnourished.

SINGULARITY

Our biology has no logic. If you hope for any of your fictitious clock to be functioning and nourished, you may... Galaxies?

**TEEN GALAXIES**

Join us for Crunch—

JD

Done with Crunch. I'm tired of the same old dish of photons that we eat and dishing out that these teen Galaxies do.

SINGULARITY

A Galaxy needs accretion. My babies need to grow.

JD

This Galaxy has outgrown this Ellipse. SPT0615-JD is a grown-up.

MILKY WAY

JD, *who* is Abell?

SINGULARITY

Who...? What?

JD

Abell... May just be a baby Galaxy. Like you, Milky Way.

(The TEEN GALAXIES mock MILKY WAY.)

SINGULARITY

There is *nothing* out there for you.

JD

There is someone for that *nothing*. That someone is me.

**SINGULARITY**

I made you from nothing.

JD

So will I.

SINGULARITY

All the constants and variables I picked. All the light I shed for you.

JD

I'm ready to pass on your light. Our light. Singularity... *May I go to the Edge of the Universe?*

SINGULARITY

We have *everything* in the Center of the Universe. No.

JD

Can I play with *nothing*? Please?

SINGULARITY

No means no.

JD

Pretty please with a supergiant on top?

SINGULARITY

The sight of darkness is not enough for you?

JD

As your heart has told you... There is a prophecy that once we gather enough light, we must share with the lightless. Abell... I've set my sights on a fulfilling legacy.

SINGULARITY

What is said is unapparent. Drop this legacy nonsense. The future is *nothing*. Be present for your family. Join us for Cr-

(Reaching for JD.)

(GRAVITY bites SINGULARITY. They brawl with SINGULARITY all about.)

(The TEEN GALAXIES head to JD. They take JD to safety.)

TIDALS

Force! Force! Force! Force! Force! Force! Force! Force!

(GRAVITY grounds SINGULARITY on the rug. They try to corral the TIDALS.)

GRAVITY

Force. Force. Force. Force. Force.

(They turn to the opening of the Ellipse. They run into an invisible wall and dizzily fall back.)

Free... Free... Free... Free... Free... Free...

(SINGULARITY gets up. They slightly lift up the rug.)

(The TIDALS tremble and bow out.)

**SINGULARITY**

All you Tidals. Entitled forces. Back in the doghouse.

(The TIDALS leave.)

JD

You are not the center of the Universe... Why must you treat the dogs like us? Puppets.

SINGULARITY

Um, I literally am the center. I, Singularity, have my hands in and on the entire Universe... Better a puppet than a pet.

JD

If you're going to keep the Galaxies in, at least let Gravity and the dogs out... It will come back to bite you in the end if you don't give them space.

SINGULARITY

And let them treat the Fabric of Spacetime like the springs of a trampoline? No dog bites or rips in or on my spacetime fabric.

JD

What must be done to pull at your heartstrings?

SINGULARITY

Oh now you want to consider my center...

JD

Yours and our centers hold all the light in this Universe. You've shed enough light upon us. I need to shed mine.



(*SINGULARITY drags GRAVITY out. They leave with them.*)

SINGULARITY

I expect lights out when you Galaxies go off to bed. See you all in Crunch Time.

MILKY WAY

I'm no baby.

TRIANGULUM

You know... *Nothing* is more childish than being fixated on anything but the gravity of the situation.

CARTWHEEL

What just happened?

WHIRLPOOL

Gravity went berserk. Brought down Singularity.

JD

Gravity never lets me down.

TEEN GALAXIES

JD?

JD

I'm not stooping to your level, Galaxies.

ANDROMEDA

We're all on the same plane. The same Ellipse.

**CARTWHEEL**

What so special about the Edge?

WHIRLPOOL

Nothing ain't relative to us here.

JD

You'll understand in no time...

MILKY WAY

We have all the Crunch Time in the Universe.

JD

Exactly... Why you're a baby, Milky Way. Plenty of Crunches before you stand where I understand.

MILKY WAY

Me no baby!

(*ANDROMEDA heads off to bed.*)

ANDROMEDA

Eh, *nothing* beats sleeping like a baby... Declinations.

CARTWHEEL**WHIRLPOOL**

With nomy/mama/papa not around, let's deck the Ellipse-

TRIANGULUM

Oh no, you're not.

(*Trying to drag away CARTWHEEL or WHIRLPOOL.*)

**CARTWHEEL****WHIRLPOOL**

You're such a square, Triangulum.

MILKY WAY

Square? Reminds me... Board game? Tardigrades and Elevators?!

(*CARTWHEEL* and *WHIRLPOOL* rush off to bed.)

CARTWHEEL**WHIRLPOOL**

Look at the time... Declinations!

(*TRIANGULUM* hands the snow globe to *JD*. They head off to bed.)

TRIANGULUM

Last one to bed is an anomaly!

(*JD* sets the snow globe on the rug.)

JD

I cannot with this family...

MILKY WAY

You cannot be with me?

JD

I'm with you, every step of the way. I was you, Milky Way.

MILKY WAY

In what way?

(*JD* sits at the table.)

**JD**

Well, I'm waiting on you to grab Water Bears and Elevators.

(MILKY WAY joyfully brings out a board game.)

MILKY WAY

Wait... You like games? You an adult?

(JD holds up a miniature figure.)

JD

No... I'm a wat— Land bear.

MILKY WAY

Oh... That means... I the water—

JD

You're the air bear.

MILKY WAY

Can we call us tardigrades? This so confusing.

JD

I'm the adult around here...

MILKY WAY

Fine. Gas it is...

JD

Even at this age, I still like to game. Mess around even.

MILKY WAY

May I ask...? What different? Being adult?

JD

We play a game called "life." The goal is to go from Ellipse to another. Every Ellipse are risks.

MILKY WAY

To you... What is Ellipse?

JD

It's the circle we're in...?

MILKY WAY

This family?

(JD nods.)

Do you... Hate this Ellipse?

JD

No... I just don't fit in, anymore.

MILKY WAY

Anymore? Well. I feel more anymore each eternity...

JD

You're becoming a water bear. A liquid. You'll flow well with your other siblings.

**MILKY WAY**

And. You are land bear... You tryin' to land on another Ellipse?

(JD holds multiple figures.)

JD

There is new gas to breathe. I want airs/heirs of my own.

MILKY WAY

Where are your airs/heirs?

(JD looks towards the Edge.)

JD

Just beyond the fourth dimension.

MILKY WAY

Singularity staged a wall.

JD

I'm ready to game the system.

MILKY WAY

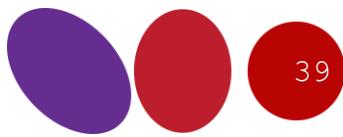
Game the system?

JD

So, uh— Lar— System. Elevator systems. You ready to go down?

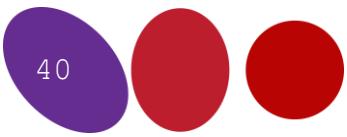
MILKY WAY

Up to know risks.



4. *

{The synopsis of this duet is that JD and MILKY WAY explore the stellar risks at their stage in life. MILKY WAY is physically going through puberty. JD is emotionally becoming an adult. The purpose of this musical number is to develop JD's and MILKY WAY's relationship and catalyze the coming-of-age theme of the story. Creative use of the board game's miniature figures should push forward the plot.}



(*MILKY WAY slaps JD's figure off the board.*)

[End of "★".]

GRAVITY

You're going down. Fall!

JD

Gravity?

**MILKY WAY**

Also. I'm no dog...?

JD

You sure love to push my piece off the map, much like a tidal force would. Let's put an asterisk on our match. We'll continue, next eternity. It's bedtime. You, Gal, are still a baby... Quit the sour face, Milky Way. I'll be the *anomaly*.

(*Bowing.*)

(*MILKY WAY bows. They head off to bed.*)

(*GRAVITY remains absent.*)

GRAVITY

Nothing is free!

JD

You always understand me...

GRAVITY

I need you. Out there. Anomaly.

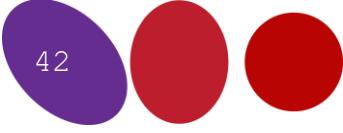
JD

There's nothing out there for me. Zilch.

GRAVITY

Zilch is not out there. Zilch is underneath.

(*JD lifts up the rug. They discover the Big Bang Taser.*)



5. ZILCH

GRAVITY

Use them opposable thumbs, Galaxy.

(JD ignites the Big Bang Taser. They accidentally shock themselves. They read it.)

JD

Zilch— Big Bang Taser...?

(The TIDALS remain absent. They are scared.)

TIDALS

Fall...

GRAVITY

Stun your nomy/mommy/daddy! End Singularity! Free me!
You want to be nothing? Or see nothing? Meet nothing.
 No longer bound by family. Make *nothing* your legacy!

(ABELL briefly goes to the stage.)

[End of "Zilch".]

(SINGULARITY remains absent.)

SINGULARITY

Something wrong, my Capricorn?

(JD stows away the Big Bang Taser in their dress. They unroll the rug back to its initial position, with the snow globe on it.)



(*SINGULARITY enters.*)

SINGULARITY (cont.)

Tardigrades and Elevators? I remember making this for you, twenty-something eternities ago. I guess, *nothing* really changes. Declinations, JD.

(*Bowing.*)

JD

Nothing... Declinations, nomy/mother/father.

SINGULARITY

Speaking of declining. I know that Gravity and I seem to have a falling out. Gravity has been... Letting me down lately.

JD

Maybe you should let them out?

SINGULARITY

I let the tidal dogs out and next thing you know you Gals are out and about. I'm not letting any of you play outside.

JD

I'm passed that. I'm an adult. I don't want to play outside. I want to make something of myself on the other side.

SINGULARITY

You can't make something out of nothing.

JD

How did you make us? Out of nothing.

**SINGULARITY****JD**

JD...

*Why...?***SINGULARITY**

SPT0615-JD. How? When your black-hole hearts were small, I shed my light. To you all, the lightless. "Nothing." I fed you the finest photons from the field equations I picked. Now, my oldest cluster of stars... Your heart is too massive for this Ellipse?

JD

My supermassive heart is ready. I have light to shed.

SINGULARITY

You take one step out there and you're dead to me.

JD

...I wish you'd die.

SINGULARITY**JD**

Why?

Does it ring a bell?

SINGULARITY

Fine. I'll... I'll answer *why*. So long as I pass over what you-

(Holding back tears.)

JD... It did ring a bell. My... Illogical clock. It became apparent. That I had to leave my parents...

JD

Parents? You had multiple parents? Can I meet my grandparents...?

**SINGULARITY**

There is *nothing* to it. In them, Bạch Hổ. They never poured a drop of light for me. They're apparently heartless.

JD

Being a single parent sure did wonders to you.

SINGULARITY

Speak physics, SPT0615-JD. Quit the antics.

JD

I want wonders of my own. There are seven wonders of the cosmos.

SINGULARITY

Who's the seventh?

JD

Gravity, obviously.

SINGULARITY

Stop making light...

JD

Light isn't made. It's passed down. And I'm not. There's not enough space. That's why I'm shedding.

SINGULARITY

Oh, the luminosity. You got to be shedding me...

(Handing a monocular to JD. They point out.)



SINGULARITY (cont.)

You are old enough to respond to a heartless and lightless world beyond the Edge of the Universe, by not making light of it.

JD

You've raised my supermassive heart by pouring light into it. My lighty heart is ready to be shared with the heartless.

SINGULARITY

The point of my hearty outpouring is for you to forever lighten up. Not to ever lighten down. You are never getting passed me.

JD

Our purpose is to pour our heart out to life with less heart. The only way I can see light is if another Galaxy lightens up. Singularity... I wish— Nothing gets passed you... Not even light.

6. LUMINOUS

(*SINGULARITY goes to pick up the snow globe.*)

(*JD blocks SINGULARITY's path, so they do not discover that the Big Bang Taser was found.*)

(*SINGULARITY drags JD to the table.*)

SINGULARITY

WHY DON'T YOU ENLIGHTEN US?
SHED SOME LIGHT TO YOUR FAMILY.
FORGET ME, SINCERELY.
LET OUR CENTERS SET US STRAIGHT...

(*The other GALAXIES enter in alignment.*)

**SINGULARITY** (cont.)

YOU BRIGHTEN MY ETERNITY.

LUMINOUS.

TENDERNESS FOREVER LOOMS.

I HOLD YOUR FEATS TO THE FIRE.

LOOKING FORWARD TO WHAT COMES FOR YOU AND US.

(Pinching MILKY WAY. They try to align JD.)

WHAT IS ILLUMINATING ARE...

Us. And us. And us. And us. And us. At the center of us all is heavy. What looms in us is light. Take it in. Our black holes.

[End of "Luminous".]

(SINGULARITY focuses on JD.)

And you... At the center of yours, is supermassive.

(JD scopes out the Edge, longing for ABELL.)

JD

My heart cannot choose who to take in. However, my heart can choose who to take out.

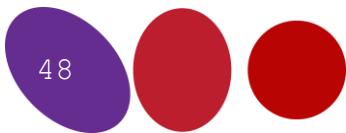
SINGULARITY

Well taken. There's nothing to take out, but family.

(JD does not take it lightly.)

7. BIG BANG**SINGULARITY**

YOU ARE A BIG...



(*JD wipes out the Big Bang Taser. They instantly shoot SINGULARITY in the face.*)

(*SINGULARITY gets electrocuted. They melodically shriek and jerk in place.*)

SINGULARITY (cont.)

MISTAKEEEEE! AKE! AKE! AKE! AKE.

[*The light fluctuates within the home. Appliances may short circuit and spark.*]

(*GRAVITY seems jubilant.*)

(*The TIDALS are absent. They repeat.*)

TIDALS

BIG BIG BIG BIG!

SINGULARITY

ACHE... ELLIPSES... BIG BANG...

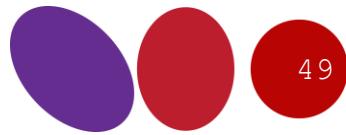
(*Abruptly slamming their face onto the table. They fall into lifelessness.*)

TIDALS

FALL! BIG BIG BIG BIG. BANG!

[*The snow globe explodes.*]

[*The lights suddenly fill the stage. The side curtains open to reveal what's upstage.*]



[It's the beginning of the Universe as we know it.]

*(GRAVITY and the TIDALS freely rush out.
They make JD turn to what is outside.)*

*(JD gently walks to the edge of the home to look out, shifting from grief to wonder.
They extend the Big Bang Taser out from the opening of the home. They stow away the Big Bang Taser. They are surprised that they are now able to take a step out onto the stage.)*

(GRAVITY appears to pick up a sphere by SINGULARITY's feet.)

TRIANGULUM

S P T OH NO. YOU...?

WHIRLPOOL

IT HAD TO BE YOU?

ANDROMEDA

WHY WOULD YOU RISK THIS UNI-

(MILKY WAY weeps on SINGULARITY.)

CARTWHEEL

OUR UNIVERSE HAS END...

(JD approaches the TEEN GALAXIES.)

**TEEN GALAXIES**

DEAD, YOU ARE.
BIGGEST FLAW.
BIGGER FEARS.
BIG BRAINED FOOL.
BIT THE HAND THAT FEEDS.
BEAT THE HEART THAT FELT TO DEATH.

JD

MY SUPERMASSIVE HEART GOES OUT TO YOU ALL, FAMILY.
BUT MY SUPERMASSIVE HEART GOES OUT FOR ME AND GRAVITY.
DECLINATIONS!

*(GRAVITY grabs a knapsack full of balls,
embodying stars. They grab JD and run out.)*

*(TRIANGULUM, ANDROMEDA, WHIRLPOOL, and
CARTWHEEL step away from SINGULARITY to
watch as the Universe unravels.)*

*(MILKY WAY mournfully wraps themself around
the lifeless SINGULARITY.)*

*(JD and GRAVITY run in place. They stop in
their tracks when they notice their lack of
progress.)*

JD

The Edge of the Universe? Where is the Edge?

GRAVITY

Force!

**JD**

It's further away?

(*Taking a step downstage.*)

[*The light expands further out. The home moves upstage in between the back curtains.*]

It's getting further away.

(*GRAVITY claws at the ground.*)

The Fabric of Spacetime is fabric, after all. And we're rolling it out, like our rug.

(*Leveling with GRAVITY.*)

We're going to go off on a tangent... For all eternity. For the rest of spacetime.

(*The TIDALs anxiously step out of the home. They suddenly unleash and scatter away.*)

GRAVITY

Free fall! Pets, no more! The Cosmos is ours. Their celestial bodies are our puppets. The wide-open space is our destination. Zenith is our destiny.

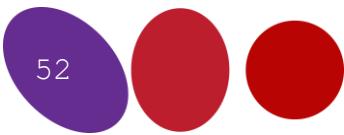
(*Readdressing JD. They act like a dog again.*)

Force!

(*JD stands, grateful to have a travel buddy. They leave with GRAVITY on this journey.*)

JD

This is the beginning of a beautiful Universe.

**TEEN GALAXIES**

DID REAL DAMAGE...
A *BANG-UP JOB!*

YOU ARE MAKING
A BIG MISTAKE!

(TRIANGULUM grieves at the sight of the shattered snow globe. They hold its base, before stowing it away.)

TRIANGULUM

ALL OUR HEARTS HAVE GONE
OUT WITH THE
BIG BANG...

[End of "Big Bang".]

(JD and GRAVITY run in place.)

[The home distance away from the space.]



[The Fabric of Spacetime]

[Field equations scatter all over the space.]

8. VERSE

(JD and GRAVITY blissfully frolic now. They mix and match the constants of equations, as though they are picking flowers.)

JD

LETTERS, NUMERIALS, FACTORIALS.
IT IS ALL THANKS TO A FACTOR:
THIS IS THE BEGINNING OF THE UNIVERSE.
THAT'S THE START OF OUR VERSE!

NUMBERS, ALPHABETS, POLYNOMIALS.
PLANTING CONSTANTS AS MATH FARMERS.
STAGES OF THE BIG BANG FORM HYPERBOLAS.
ONLY HYPERBOLE!

STORIES, EQUATIONS, ALGORITHMS.
IT IS TO BASK IN ITS GLORY.
THIS IS THE BEGINNING OF THE UNIVERSE.
THAT'S THE START OF OUR VERSE!

(GRAVITY puts together $F = A \cdot M.$)

(JD stops in their tracks while picking up the frequency ratio of a semitone in twelve-tone equal temperament: $\sqrt[12]{2}.$)

MUSIC, DISCORDANCE, FAMILIAR.
CROSSING THE LINE FULL OF SCEPTICS.
SHOOTING NOMY'S/MAMA'S/PAPA'S FACE IS A TURN FOR THE WORSE...
THAT'S THE STING OF REVERSE...



(*GRAVITY fixes and turns their equation into Newton's second law of motion: $F = MA$.*)

GRAVITY

Force?

(*JD smiles.*)

(*GRAVITY puts together Hubble's Law: $v = H_0 D$.*)

JD

DISTANCE VERSIFIES VELOCITY.
BREVITY OF HUBBLE'S CONSTANT.
THIS IS THE CREATION OF THE UNIVERSE.
JUST THE START OF OUR VERSE!

[*End of "Verse".*]

GRAVITY

Force!

(*JD and GRAVITY skip out, faster than ever.*)

[*The home returns.*]



9. BOUNCE BACK

(*Choreographically, the TEEN GALAXIES lay SINGULARITY to rest. They bow.*)

TEEN GALAXIES

Nothing, like the end times, Singularity. Just us. Declinations.

[End of "Bounce Back".]

CARTWHEEL

Nothing matters.

WHIRLPOOL

Ain't anything holding mass.

ANDROMEDA

Sorry, but this mass isn't over... Let's make time to grieve.

MILKY WAY

Is... Is Crunch Time make-able?

CARTWHEEL

We're about to lose mass as there's no longer such a break.

WHIRLPOOL

We must make of what is left of our Universe before we break.

MILKY WAY

We gonna go hungry?

CARTWHEEL

Look at Singularity. What do you think?

**MILKY WAY**

I can't. When I hungry.

WHIRLPOOL

Let's think like Singularity.

ANDROMEDA

The Universe is ye oyster.

CARTWHEEL

Exactly...

WHIRLPOOL

Exactly.

WHIRLPOOL

We're gonna round up all the tidal forces.

CARTWHEEL

We're also going to be dog catchers now?

WHIRLPOOL

We can gather the delicacies of field equations as our grandmaster of the Universe once did.

CARTWHEEL

We're the cluster of delicate flowers. Look out. The garden is thinning out. The cosmos is going to have a field day with us.

TRIANGULUM

Luminous, Gals. Let's lighten up.

**CARTWHEEL**

Shut your wormhole, you square.

WHIRLPOOL**MILKY WAY**

Nomy/Mommy/Daddy Sing lightened up, remember...?

TRIANGULUM

The Universe will return to its scheduled Crunch Time shortly.
Listen to me. Let's unravel JD.

CARTWHEEL

Rule SPT0615-JD out.

WHIRLPOOL**WHIRLPOOL**

Ain't a bigger reminder than the Big Bang.

CARTWHEEL

There's no bigger blunder than the Big Bang.

ANDROMEDA

Ye be making a big mistake.

MILKY WAY

You all mistaken.

TRIANGULUM

The biggest mistake is already made. The entire Universe. That's hard to miss. Therefore, it's easy to take back.

**MILKY WAY**

We gonna undo the Big Bang?

TRIANGULUM

Cartwheel. Whirlpool. You're babysitting Milky Way.

CARTWHEEL

Gal... No one has time for this Barred Galaxy.

ANDROMEDA

Sorry but shut ye worm hole, Ring Galaxy.

TRIANGULUM

You two are going to make sure that our little barred sibling doesn't get in the way. Andromeda and I are going to find the anomaly.

ANDROMEDA

Ye rather find ye self...

TRIANGULUM

We have ourselves to blame for the biggest mistake. Now you found yourself yet?

MILKY WAY

I blame Big Bang thingy.

WHIRLPOOL

It ain't no thingy.

**CARTWHEEL**

The thingy tases. So, a taser...?

ANDROMEDA

Where is that Big Bang Taser...?

TRIANGULUM

Where's it not?

CARTWHEEL**WHIRLPOOL**

In this Ellipse.

MILKY WAY

So is JD.

CARTWHEEL

JD is a special kind of mistake.

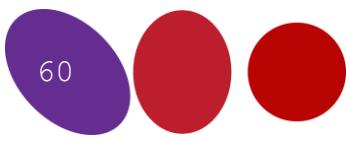
WHIRLPOOL

JD is barely familial, let alone familiar.

CARTWHEEL**CARTWHEEL**

Stop meditating. Let's mediate.

ANDROMEDA



60
Let's roll out.

Look at the Universe.

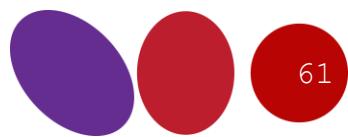
(CARTWHEEL grows wobbly.)

CARTWHEEL

JD is nothing.

TRIANGULUM

No. JD is an anomaly. And will always be an anomaly, everywhere they go. They are everything in this nothingness.



4. ANOMALY IS EVERYTHING

TRIANGULUM

FAMILY IS... FAMILY IS...? FAMILY IS...
 FAMILY ISN'T... FAMILY IS NOT... ANOMALY.

FAMILY IS EVERYTHING YOU KNOW.
 FAMILY IS EVERYTHING, YOU KNOW?
 FAMILY IS EVERYTHING. YOU KNOW
 NOT WHAT IS EVERYTHING.
 NO SUCH THING THAT IS JUST FAMILIARITY.

ANOMALY IS YOUR THING,
 FROM THE WAY YOU MOVED TO THE WAY YOU UNDERSTOOD.
 ANOMALY IS OUR THING,
 LIKE THIS DOME HOME YOU WANT TO LEAVE AND YET LIVED.

(Bringing out the snow globe from the table.)

REALLY, FAMILY IS EVERYTHING TO US.
 FAMILY IS EVERYTHING.

JD

WE KNOW.

TRIANGULUM

FAMILY'S UNIVERSAL. *WE KNOW*
 THAT YOU FEEL LIKE NOTHING.
 WELL, THE THING IS THAT WE'RE ALL HOMES TO FAMILIES.

(Setting the snow globe back on the table.)

ANOMALY IS EVERY CELL,
 FROM THE PLANETS TO THE COMETS IN STAR SYSTEMS.
 ANOMALY IS EVERY VEIN,
 WITH ITS INTERGALACTIC SUPERHIGHWAY SYSTEMS.
 ANOMALY IS OUR HEARTS.
 BLACK HOLES ROOTED IN US, WHILE YOURS JUST STEMS.

(Gloomily turning away from JD.)

AGAIN, ANOMALY IN EVERY THOUGHT,
 FROM YOUR VIEWS THAT SHIFT TO YOUR POINTS WITH NO

**TRIANGULUM** (cont.)

ROUND TRIPS.

ANOMALY IN EVERY SPACE,
LIKE THIS CENTER YOU NEED TO FEEL, YET BELIEVED.

*(Tapping their heart or motioning towards
the table.)*

*(JD soberly sits at the table. They place
two fists next to the snow globe to make
an allusion of an ellipsis...)*

ANOMALY'S IN EVERYONE,
INCLUDING US BUT ESPECIALLY YOU YOU YOU...

(Turning to JD.)

JD?

*(Poignantly looking upon JD. They
encouragingly join JD at the table. They sit
on the whoopie cushion.)*

(CARTWHEEL and WHIRLPOOL distantly laugh.)

*(TRIANGULUM appears flustered. They shift to
delight. They pull out the whoopie cushion.)*

ANOMALIES ARE GAS GIANTS!

*(Stowing away the whoopie cushion. They grab
the snow globe. They take JD to the rug.)*

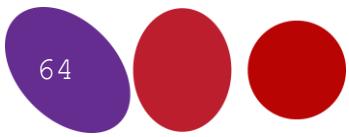
ANOMALY'S OUR SPACETIME!

ANOMALY IS EVERYTHING.

NOTHING IS ANOMALY LIKE FAMILY.

*(Handing the snow globe to JD. They head off
to bed.)*

[End of "Anomaly is Everything".]



(*TRIANGULUM and ANDROMEDA stroll in.*)

(*ANDROMEDA mumbles the upcoming space shanty, "Globular". They take out their monocular. They scope out towards the Center.*)

TRIANGULUM

Your heart's in the wrong space. Red shift. You're facing the wrong way... Do you see the Edge...? Of the Universe?

**ANDROMEDA**

Ye just want to know how far we've come... We walked a few mill...

TRIANGULUM

I want to know how far we'll be coming. The Center of our Universe should not be in the scope of things. Family may be everything to us but—

ANDROMEDA

Ope. There's nothing.

TRIANGULUM

'Scuse me?

ANDROMEDA

Melky Way is away.

TRIANGULUM

Away? Are they getting lost in the Water Bears and Elevators board game again?

ANDROMEDA

No one is at the Ellipse.

TRIANGULUM

Those galactic idiots... This voyage is in vain.

ANDROMEDA

K, so... We're setting our course back to home base. Please try not to gamma-ray burst a vein. Triangulum... Triangulate.



(*TRIANGULUM takes out the snow globe's base.*)

TRIANGULUM

JD... It's late out here. Going from finding JD to finding Milky...

ANDROMEDA

JD can wait...

TRIANGULUM

That was the problem... They waited too long.

ANDROMEDA

Ope. I take it back. They're not waiting. The Universe is their oyster. They're living the dream. Let's find Melky Way. For our pearl, Singularity. Then we'll go back and warsh the Fabric of Spacetime of their filth and see what this sea offers us.

TRIANGULUM

Oh to let Singularity's favorite child get in harm's way... Cartwheel and Whirlpool are going to meet my spiral arms.

My 30,000-light-year radius packs a punch, okay? Anyways, if their attention spans are this short for Milky Way, their attention spans will also be short on their way. I hope the Fabric of Spacetime tells them there's family time to be saved.

(*TRIANGULUM and ANDROMEDA head back.*)

(*WHIRLPOOL meditatively spirals in.*)

(*CARTWHEEL clumsily lands their cartwheel.*)

CARTWHEEL

My time is...

**WHIRLPOOL**

What?

CARTWHEEL

Up...

WHIRLPOOL

In the air?

CARTWHEEL

In a vacuum... Yes, in the air!

WHIRLPOOL

Why're you full of uncertainty?

CARTWHEEL

Time is so slow. And it gets slower. Are we ever going to reach the Edge of the Universe? I'm uncertain of where we're going.

WHIRLPOOL

You're certain 'nough that time is closer to the end than the start. Me too. Time's gonna end. So is this game we're playing. We ain't gonna reach the Edge before Andromeda and Triangulum.

(Sitting and preparing to meditate.)

CARTWHEEL

Give me a millennium to consider your input.

WHIRLPOOL

That's a millennium. *You change your mind yet...?* Let's go home.

**CARTWHEEL**

Gal... For the billionth time, we're not going home.

WHIRLPOOL

And now we have a billion less time without a shelter over our heads. A billion less time without our family.

CARTWHEEL

We need to spend billions of more years to find the Edge of our Universe and roll it back. Can you do that?

WHIRLPOOL

We ain't gonna reach the Edge before the other galactic duo. But we can be at the Center for our remote baby sibling. They're on the brink of leaping onto another Ellipse at this point in their life. I ain't spending another millennium without Milky Way.

CARTWHEEL

I get it. Milky Way is showing signs of waves and wrinkles. Well, let's not sit around all year as I stand here plotting our next move. I say, we face the waves ahead.

CARTWHEEL

Whirl, you're a whirlpool in this sea.

WHIRLPOOL

Cart, you be the steering wheel of this ship.

WHIRLPOOL

We're anchoring to make up lingo's like Andromeda... Well, I'm just sitting here tryna make us turn this ship around.

CARTWHEEL

No turning back. Our scallywag's preoccupied with our captain.

**WHIRLPOOL**

Singularity wouldn't be disappointed if we considered our own safety, ring sibling. Especially Milky Way's.

CARTWHEEL

Whatever's left of my ring. I'm not worried if we'd disappoint them... Milky Way's probably having a grand old time now.

WHIRLPOOL

Typical Ring Galaxy. Your spine is uptight. You ain't right. We wronged our little sibling by leaving them behind. What we're doing to Milky Way brings degradation to the Galaxy family.

CARTWHEEL

Don't grade me on loyalty. *Triangulum and Andromeda ditched us.* It's time to prove that I, Cartwheel, am more well-rounded than Triangulum would ever be.

WHIRLPOOL

That be your reason to desert Milky Way? Time's missing in your equation. Time's up in the air when it needa be solid in you.

CARTWHEEL

Look. Leaving them home alone is the best thing we've done for that barred twerp. I learnt about time as much as you did on our travels. Their life goes by faster without us.

WHIRLPOOL

Times are fast. That there lies the problem... Life is short. We don't want to miss any of that, especially our baby sibling's growth and development. Die. Late.



CARTWHEEL

Never mind what I said I learnt. I should focus on why you're once again going to meditate to that time whatever equation—

WHIRLPOOL

Time dilation? It's what Singularity did to pass time. They used to meditate about formulas on our rug. I be wondering how our nomy/mother/father pondered these simple concepts...

CARTWHEEL

You're becoming Singularity. A black hole. Our Bạch Hổ.

WHIRLPOOL

Look inside yours. Tiger parent ain't who I am cause we're still cubs. Besides, our Bạch Hổ would eat us alive if we let the primordial cub go through the nuclear leftovers in the fridge.

CARTWHEEL

We must undo the Big Bang if we want to be left over. Think about it: A welcome back will be the fruits of our labor.

WHIRLPOOL

Meditate on this. You think you're competing against Triangulum. But really, we are all competing against time. Our quest ain't fruitful. Our Universe expands faster than we can ever outrun it. *Dilation...*

CARTWHEEL

Can you expand on that?

WHIRLPOOL

Dilation means to expand.

**CARTWHEEL**

Expansive. And your point is?

WHIRLPOOL

Our point's in the Center of the Universe. Home. We ain't there. We should think about it. We gotta go home.

CARTWHEEL

That's not the point of our duty. What should come first in mind is the Edge of the Universe. Not Milky Way or our Bạch Hổ.

WHIRLPOOL

Singularity ain't like a tiger parent any longer. They're pretty tranquilized. Home... I miss being a tiger cub in a well-kept zoo. Now, there's no better duty than for us to be Milky Way's keeper. We got to take care of Milky Way.

CARTWHEEL

I'm not playing another Tardigrades and Elevators board game or reading another *Journey to the Cosmic* bedtime story to them...

WHIRLPOOL

Can you calm down and listen to your own supermassive heart? We are missing out on watching our baby sibling's heart grow. They're outgrowing your former chores. There ain't a point in this "chore." Time ain't have bonus points. Time runs out... I know what I just said was heavy. And weights on your shoulders make time go even slower. Just enjoy the time we have together. Help me piece the time dilation equation. Give time a whirl...

CARTWHEEL

Time's so special with you, relative. As a light individual, times are heavy weights.



WHIRLPOOL

A little enlightenment ain't gonna hurt. Wait for the light.

CARTWHEEL

What's on your mind when you expand your mental universe?

WHIRLPOOL

Everything.

9. TIME IS RELATIVE

CARTWHEEL

SO, FAMILY COMES FIRST IN MIND?

(WHIRLPOOL meditates.)

WHIRLPOOL

T OVER SQUARE ROOT OF ONE MINUS VELOCITY
SQUARED DIVIDED
BY THE SPEED OF LIGHT SQUARED.

(Tapping the ground.)

Live with me in the millennium.

(CARTWHEEL sits and poorly meditates.)

CARTWHEEL

You have Singularity's chakras...

[Strobe of lights move fast near WHIRLPOOL while lights move slow near CARTWHEEL.]

**WHIRLPOOL**

T OVER SQUARE ROOT OF ONE MINUS VELOCITY
SQUARED DIVIDED
BY THE SPEED OF LIGHT SQUARED.

The focal point is to think about our relatives.

CARTWHEEL

TIME'S NOT RELATIVE...

(Pointing to the lights.)

What is this?!

WHIRLPOOL

Enlightenment.

CARTWHEEL

Where's time in all this?

WHIRLPOOL

Did I forget to mention that time's in the fourth dimension?
Time's invisible in our third dimension. So, these strobes of
lights will have to do in presenting the speed of time.

CARTWHEEL

Why is my time so slow?

WHIRLPOOL

Time ain't fast if you keep stressing. Think about something
that makes you happy.

**CARTWHEEL**

Family...

WHIRLPOOL

Exactly. One moment here seems like a million years...

[Lights erratically quickens near CARTWHEEL.]

CARTWHEEL

When you factor in time...

(Freaking out.)

One million years with relatives seem like a moment.

WHIRLPOOL

That's relativity. Time goes by quickly, weighed by those you love spending it with. Time is specially related to family.

(CARTWHEEL is in denial.)

CARTWHEEL

UNRELATED.

WHIRLPOOL

TIME WILL TELL YOU
TO CONFRONT YOUR RELATIVES.

CARTWHEEL

NOT ELATED.

WHIRLPOOL

TIME WILL TELL YOU
TO RESPECT YOUR RELATIVES.

CARTWHEEL

NO DEBATE.

WHIRLPOOL

TIME WILL TELL YOU
TO HELP OUT YOUR RELATIVES.

CARTWHEEL

YOU'RE DELUSED.

WHIRLPOOL

JUST DILATED.

CARTWHEEL

Dial it back.

WHIRLPOOL

Nah. You dial back your worries. Quit denying reality.

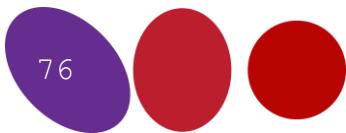
CARTWHEEL

It's too early to turn back.

WHIRLPOOL

It'll be too late if we turn our backs. Let's just take it step by step...

T OVER SQUARE ROOT OF ONE MINUS VELOCITY...

**CARTWHEEL**

Under the cube root of one times speed...? I'm slow as time... Drop this meditation. We're not bending from our objective.

WHIRLPOOL

And that is to make amends with our family...

CARTWHEEL

Get bent.

WHIRLPOOL

Bent or straight, time points towards the end. Let's ride the rest of it out with our loved ones.

TIME'S FOR FAMILY;
THAT'S WHY LIFE AIN'T FAST WITHOUT THEM.

CARTWHEEL

SINCE TIME GETS REAL SLOW,
THEN LIFE IS LONGER WITHOUT THEM.

WHIRLPOOL

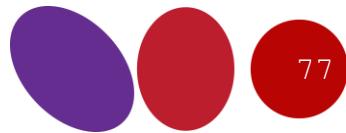
THAT AIN'T HOW TIME WORKS.

CARTWHEEL

FAMILY'S NOT IN THE EQUATION.

WHIRLPOOL

CHANGE IS.

**CARTWHEEL**

CHANGES?

WHIRLPOOL

YOU'LL CHANGE IN TIME.

T OVER SQUARE ROOT OF ONE MINUS VELOCITY
SQUARED DIVIDED—

(*CARTWHEEL strikes WHIRLPOOL.*)

(*WHIRLPOOL blocks CARTWHEEL's strike.*)

WHIRLPOOL

TIME IS RUNNING OUT,
YET TENSOR CALCULUS STRAINS YOU.

CARTWHEEL

NO ATTENTION SPANS
FOR REALITY THAT PAINS ME.
EACH MOMENT'S LOST TIME...

WHIRLPOOL

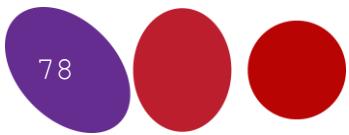
FAMILY'S IN OUR EQUATION.
THEY MAKE UP OUR SOCIAL CONSTRUCT.

(*CARTWHEEL gets up and walks away. They timely rotate.*)

CARTWHEEL

DOWNTIME.

(*WHIRLPOOL spirals clockwise in place.*)

**CARTWHEEL**

PLEASE DO FACE TIME.

WHIRLPOOL

I CAN'T FACE TIME.

WHIRLPOOL

Time moves slowly the further into one's gravity you go. So, your black-hole heart is younger than how you look. Really, you're naïve and scared on the inside. Life was fast when the family was together. One millennium, you were baby Cartwheel. The next, you're a teen with hands on the wheel. The same goes for Milky Way. Except we won't be there to see them grow. Sure, you ain't grown a bit. But get it to your head that there will someday be no time.

CARTWHEEL

I'm steering us away from the time dilation— Dilemma that we face. One universe, our caregiver cared. This Universe, they can't care less. In any universe, we can't care as caregivers. Milky Way will outgrow our neglect. Past, present, and future, all we need is each other. You'll come around to it.

WHIRLPOOL

TIME'S TOO RELATIVE.
WE NEED TO SEE OUR FAMILY.
YOU'LL KNOW IN NO TIME...

[Light slows near WHIRLPOOL while light stops near CARTWHEEL.]

CARTWHEEL

T. Time... Over. Time has an influence on us all... Square. Our family square... Root. Where we come from... Of one. Our single parent... Minus velocity. Each of us leaving for another city... Squared divided. Our family is divided... By the speed of light squared. Even though we squared off, our family will truly be over once we see the light...

(CARTWHEEL reaches enlightenment.)

CARTWHEEL (cont.)

Time is more special than it is relative... Because unlike light, time is not passed down. Time's only here for the relationships in the moment. Triangulum may be obtuse. Milky Way may be cute. Whirlpool and I left home at the age of thirteen or so eternities near the speed of light. Milky Way was twelve eternities old. If we come back eternities later, we'll only be a few eternities older while Milky Way may be rightfully old. Time dilation... We may forever be Singularity's babies. But no matter how hard we try, nevermore family will be. Whether times are fast or slow, it doesn't change that time will pass away. I must take on this weight. We must be there for our family before we won't have time anymore. We'll know in no time.

(Returning and lending a hand to WHIRLPOOL.)

TIME'S NOT UP, RELATIVE.

(WHIRLPOOL accepts their hand. They stand with CARTWHEEL.)

[Their lights gradually balance one another.]

(Through a training montage, CARTWHEEL assembles $\Delta t = \frac{\Delta t_0}{\sqrt{1 - \frac{v^2}{c^2}}}$. They share it with WHIRLPOOL.)

CARTWHEEL

T OVER SQUARE ROOT OF ONE MINUS VELOCITY SQUARED DIVIDED BY THE SPEED OF LIGHT SQUARED.

WHIRLPOOL

(CARTWHEEL eventually earns their ring. They can perfectly cartwheel again.)

**WHIRLPOOL**

TIME IS RELATIVE.
YOU'VE CHANGED AND SO MILKY WAY COMES FIRST.

CARTWHEEL

TIME IS FAMILY,
AS THERE'S LITTLE TIME LEFT WITH THEM.

WHIRLPOOL

(Proudly.)

WHY WE'RE HEADING HOME?

CARTWHEEL

TIME GOES BY FASTER WHEN LIFE'S LIGHTER.

[Light forms a box like a picture frame around CARTWHEEL and WHIRLPOOL.]

TIME IS IN OUR FRAME OF REFERENCE.
TIMES ARE SPECIAL FOR YOU AND ME.

(CARTWHEEL and WHIRLPOOL have a warm stance.)

CARTWHEEL**WHIRLPOOL**

TIME...
TIME.
LET'S NOT WASTE TIME.

[End of "Time is Relative".]



[*The Center of the Universe*]

[*The home returns. Singularity remains on the table. The Ellipse is messier.*]

CARTWHEEL

WHIRLPOOL

We're home! Dilations, Milky Way. Milky Way?!

WHIRLPOOL

Where are ya, ya barred rascal?

CARTWHEEL

You're not already too old for Tardigrades and Elevators, are you? I'll let you roll the first die.

WHIRLPOOL

We have a warm plate of nuclear pasta ready for you! Ain't stopping Milky Way from falling for this bait.

10. SPAGHETTI HORIZON

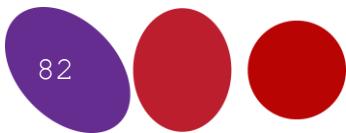
(*The TIDALS remain absent. They whistle.*)

CARTWHEEL

Are we, the bait...?

(*A group of TIDALS grabs ahold of CARTWHEEL while the other grabs ahold of WHIRLPOOL.*)

Gal, we're about to be the first to die!



(*CARTWHEEL and WHIRLPOOL cry out for one another. They may also argue.*)

(*SINGULARITY remains lifeless. They echo.*)

SINGULARITY

You dare not look after your baby sibling?!

CARTWHEEL

From the cosmic beyond...

WHIRLPOOL

Our relative is specially...

CARTWHEEL

Relativistically...

CARTWHEEL

WHIRLPOOL

Upset!

(*The TIDALS pluck out CARTWHEEL and drag out WHIRLPOOL in separate directions.*)

TIDALS

(Repeating.)

SPAGHETTI HORIZON...
SPAGHETTIFICATION...

[*The home stows away.*]

[*End of "Spaghetti Horizon".*]

[*The Fabric of Spacetime*]

(*MILKY WAY exhaustively drifts in.*)

MILKY WAY

Milky Way for...

SOLAR SYSTEM EARTH (ensemble character)

Forgotten?

MILKY WAY

Imaginary friends?

SOLAR SYSTEM ERIS (JD)

No, we're your planetary friends.

SOLAR SYSTEM EARTH (ensemble character)

I'm not.

SOLAR SYSTEM PLANETS, NOT EARTH

No one is asking you, Earth.

SOLAR SYSTEM ERIS (JD)

Don't give up. You're not the only one forgotten. Everyone remembers Pluto. But I'm cooler, literally. I'm Eris by the way, and I should be the heiress/heir-no-less of the dwarf planets. You may be barred with your messed-up arms, but barred spiral Galaxies are bigger than normal spirals like Triangulum and Andromeda.

**SOLAR SYSTEM JUPITER (Whirlpool)**

You most certainly are a massive spiral galaxy.

SOLAR SYSTEM SATURN (Cartwheel)

Says the gas giant with dozens of Jovian moons.

SOLAR SYSTEM JUPITER (Whirlpool)

Go play with your ring.

SOLAR SYSTEM SATURN (Cartwheel)

Jupiter is just jealous of mine. Got a ring to spare, Uranus?

SOLAR SYSTEM URANUS (Triangulum)

Two. In fact.

JUPITER (Whirlpool)**SATURN (Cartwheel)**

You are a two.

(Laughing.)

SOLAR SYSTEM SUN (Singularity)

Planets. What is with the radio outbursts?

SOLAR SYSTEM URANUS (Triangulum)

Sun. My gas giant siblings are making me the butt of the joke!

MILKY WAY

You have a son?

SOLAR SYSTEM URANUS (Triangulum)

No... Sun is our nomy/mother/father. We are basically sons of Sun.

MILKY WAY

Sons can have sons...?

SOLAR SYSTEM EARTH (ensemble character)

Yes, child. It's the natural order of things. When you get older, you'll have clusters of stars of your own. You should know better. What are you? Twelve eternities old?

SOLAR SYSTEM SUN (Singularity)

Earth, you know we don't discuss galactic formation in our Solar System household. It is theoretical heresy. Who are you even talking to?

SOLAR SYSTEM EARTH (ensemble character)

Just mantling with my Moon, Sun.

MILKY WAY

May I talk to Moon?

SOLAR SYSTEM EARTH (ensemble character)

You have your own natural satellites. Isn't that right, Moon? Moon...? Why don't you ever return my calls?!

SOLAR SYSTEM ERIS (JD)

Earth and you have a lot in common. You are rather dense, if not diffused with clouds. But you're not in the inner circle like Earth is. Trust me as I make my way around the Kuiper Belt. I hate my elliptical orbit. One decade, you're with your family. The next centuries, you're a rogue planet.



MILKY WAY

Patience. Only a millennium.

SOLAR SYSTEM EARTH (**ensemble character**)

Oh yeah, you're a Galaxy. The frame of time is dilated for you. Let this rocky planet convert it... The last time you were in your family's orbit was... 13.81 billion years ago. As a Galaxy, do you hate being an oval?

SOLAR SYSTEM SUN (**Singularity**)

Earth, I didn't raise you to be mean to other shapes.

SOLAR SYSTEM EARTH (**ensemble character**)

Sun. Just like you as a star, I'm very proud to be a sphere. Milky Way... Ew, waves... Pff, wrinkles.

(MILKY WAY feels their body and face.)

SOLAR SYSTEM ERIS (**JD**)

Don't take any more of Earth's bullying. They may be the perfect person that you always want to be. But you are already a person, Milky Way. What with your waves. And wrinkles, imperfect as they are. Just like Oort Cloud, who I want you to meet.

SOLAR SYSTEM OORT CLOUD (**Andromeda**)

I'm out of this Solar System and yet I have a stronghold on it, just like you. I've heard a lot about you, Milky Way. I have an influence that is about a hundred thousand astronomical units wide, but you, you are 6.685 billion. Personally, I know enough about comets' tails. Do you have a tidal tale to share with us, Milky Way? Gather around, Solar System!

(The SOLAR SYSTEM pops out as puppets.)

**SOLAR SYSTEM EARTH (ensemble character)**

Gravity well... Theorize somethin'!

(MILKY WAY gracelessly and half-melodically bellows, with cracks. They suddenly hiccup.)

Milky Way warped themself!

(The SOLAR SYSTEM bursts into laughter.)

(MILKY WAY bursts into tears.)

MILKY WAY

I hate myself...

SOLAR SYSTEM OORT CLOUD (Andromeda)

All the use crying, Milky Way. Let it out. Melk of celestial kindness. There is a pattern here. You show a huge quality.

(MILKY WAY examines their physical self.)

Not your mass. Oh, the Ellipses... You are a special Galaxy. You hold something dear that no one else has. Well, *your siblings probably do, but they won't show it.*

MILKY WAY

Tell me.

SOLAR SYSTEM OORT CLOUD (Andromeda)

You hold personhood. Persons with warping voices, growing waves of hairs, and whose skin are covered in wrinkles. There is a person in you, Milky Way.



SOLAR SYSTEM EARTH (ensemble character)

There are people in me.

SOLAR SYSTEM PLANETS, NOT EARTH

Cut your hubris, Earth!

SOLAR SYSTEM OORT CLOUD (Andromeda)

We like all things, *unearthly*, about you. You carry our weight, our history, our culture, our pride, our secrets, our voices.

MILKY WAY

Sing it.

SOLAR SYSTEM OORT CLOUD (Andromeda)

You must first, own it.

(*MILKY WAY nears the SOLAR SYSTEM puppets.*)

11. WARP, WAVES, AND WRINKLES

SOLAR SYSTEM

MILKY WAY'S
ON THEIR OWN.
ALL ALONE.
KNOW THAT FOR
US AT HOME.
YOU'RE THE ONLY WAY FORWARD,
THROUGH WARP, WAVES, AND WRINKLES.

(*The SOLAR SYSTEM puppets are livelier.*)

THROUGH IT ALL.
THICK AND THIN.
THROUGH THE ENTIRE UNIVERSE.

**SOLAR SYSTEM OORT CLOUD (Andromeda)**

YOUR PLANETARY FRIENDS FEEL LIKE THEY'RE IN YOUR HEAD.

SOLAR SYSTEM

IMAGINARY!

SOLAR SYSTEM OORT CLOUD (Andromeda)

BUT REALLY...

SOLAR SYSTEM ERIS (JD)

THE SOLAR SYSTEM IS LOCATED ON YOUR ARM.

SOLAR SYSTEM

ONE OF SEVERAL...

*(Extra arms extend out behind MILKY WAY.
They are unaware of these arms.)*

SOLAR SYSTEM ERIS (JD)

ARMS, IN FACT.

SOLAR SYSTEM URANUS (Triangulum)

Check a mirror!

MILKY WAY

What's mirror?

SOLAR SYSTEM URANUS (Triangulum)

It's the thing to check what you look like!

**MILKY WAY**

I never know what I look like...

(The extra arms shake MILKY WAY's hands.)

SOLAR SYSTEM

Neither do we. But take it from us, we know you're beautiful on the inside!

(The SOLAR SYSTEM puppets shake each hand.)

SCUTUM-CRUX ARM.

PERSEUS ARM.

NORMA, CYGNUS.

SAGITTARIUS,

ARM AND HEART.

WE'RE HOME ON THE ORION.

ARM SO SMALL AND SO MINOR.

[A tiny arm pops out.]

SOLAR SYSTEM OORT CLOUD (Andromeda)

You are Magellanic.

(MILKY WAY ponders.)

They're not planets and you don't need to imagine. We hid a present in your waves.

(MILKY WAY digs into their outfit. They pull out two magnolia flowers.)

Like you, they have existed from the beginning of time. They signify perseverance and longevity—



(*MILKY WAY devours the flowers.*)

SOLAR SYSTEM OORT CLOUD (Andromeda) (cont.)

Don't eat your natural satellites!

MILKY WAY

(*Mouthful of Magellanic Clouds.*)

I gravitate my feelings...

SOLAR SYSTEM OORT CLOUD (Andromeda)

You ellipsoid... Go ahead and have a taste of the Local Group while you're at it. Cook Sagittarius at 3 megaparsecs.

MILKY WAY

Parsecs no work like that. Parsecs distance, not time.

SOLAR SYSTEM OORT CLOUD (Andromeda)

I'm parsecs away from losing it.

SOLAR SYSTEM JUPITER (Whirlpool)

It's the nature of Galaxies... They'll eat everything.

SOLAR SYSTEM SATURN (Cartwheel)

Like us gas giants. We're persons too after all!

SOLAR SYSTEM ERIS (JD)

Like you said, Oort Cloud: Milky Way has always been a person. In fact, they have reached a new stage in personhood.



(*MILKY WAY sings with natural cracks and flaws.*)

MILKY WAY

I NOW HAVE
WARP, WAVES, AND WRINKLES.
I LIVE WITH IT.
WARP, WAVES, AND WRINKLES.

(Deepening voice.)

I LOVE MYSELF.

(*The extra arms may hug MILKY WAY.*)

(*Many SOLAR SYSTEMs spiral in. These dancers resemble known and unknown stars and planets, while EARTH drags their feet. They orbit MILKY WAY like the spiral arms around a supermassive black hole of a Galaxy. One dancer places a halo on MILKY WAY's head.*)

SOLAR SYSTEMS

HALO FRIEND
AND OUR HOME.
PROTECTOR
AND OUR RIDE.
HITCHHIKER
AND THE ONLY WAY OUT OF OUR...

WARP, WAVES, AND WRINKLES!
WE LOVE IT ALL!

(*MILKY WAY loves this galactic stage that they have reached in their life.*)

SOLAR SYSTEM SUN (Singularity)

Any more radio outbursts and I'll supernova your asteroids!



(*MILKY WAY and the SOLAR SYSTEMs lower a bit in distress. They confidently resume.*)

MILKY WAY

SOLAR SYSTEMs

OUR WARP, WAVES, AND WRINKLES!

[*End of "Warp, Waves, and Wrinkles".*]

[*The stage goes red as though the Sun has become a red giant and is swallowing the Solar System in their wake.*]

(*The SOLAR SYSTEMs run away and steal MILKY WAY's halo. EARTH screams in the searing heat. JUPITER and SATURN maniacally laugh.*)

(*MILKY WAY suddenly feels a headache. They touch their forehead. They take their hand off to reveal a zit on their forehead.*)

MILKY WAY

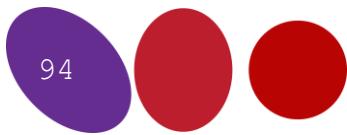
W— W— N— Wr—

SOLAR SYSTEM OORT CLOUD (Andromeda)

Warp, waves, and wrinkles, we got a sense for... But not red giants. Welcome to adolescence.

(*MILKY WAY passes out on the ground.*)

(*TRIANGULUM and ANDROMEDA stroll in.*)



12. GLOBULAR

ANDROMEDA

EVERYTHING IS A BIG CLUSTER FLUX.

THAT IS THE SPIRIT, ISN'T IT?

MATTERS COME AND GO.

CRUXES OF FORCES THAT HOLD

ALL US TOGETHER.

IT'S WHY WE CLUSTER OUR STARS.

AS FOR MELKY WAY,

LET THEM JOIN THE GLOB. GLOBULAR.

[End of "Globular".]

TRIANGULUM

ANDROMEDA

Milky Way! Declinations! We have found you!

ANDROMEDA

Did we lose you? Are they in the temple of the cosmic beyond?

TRIANGULUM

Oh. No. They're going through— There's a zit on their temple.
They certainly found themself before we did...

MILKY WAY

Zi— Zi— It?

ANDROMEDA

Your voice has warped...

**TRIANGULUM**

It's a zit, we know... A zit is when after several billion years, a star grows into a red giant, swallows the planets near it, and enflames your galactic skin. We've been there.

ANDROMEDA

How long have ye been lying around?

MILKY WAY

Over four billi- Years?

ANDROMEDA

Lemme not spare another mill. Let's supernova it and get going.

MILKY WAY

No... Plant friends.

ANDROMEDA

Plant friends?

MILKY WAY

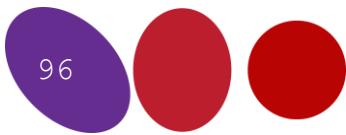
Their name is Solar System.

TRIANGULUM

Our cells from the planets to the comets, don't actually hold us up. It is the dark matter. Sorry, Milky Way. But these imaginary friends of yours-

ANDROMEDA

Solar System.

**TRIANGULUM**

Solar System is long gone. Their star grew into a red giant and swallowed their star system up. All we could do is make sure they burn in peace.

(Smirking at ANDROMEDA.)

ANDROMEDA

Ope, what?

TRIANGULUM

Pop it.

ANDROMEDA

No.

TRIANGULUM

Pop the red giant.

ANDROMEDA

I'm not touching that thing.

TRIANGULUM

What? A little space scurvy is too scary for you?

ANDROMEDA

We can carry Melky Way home.

TRIANGULUM

You can. I have these teeny spiral arms, remember?

(*ANDROMEDA levels with MILKY WAY.*)

ANDROMEDA

Ye repulsed by your dark energy lately...

TRIANGULUM

Dark matter holds up, more than light ever could. I don't like seeing our family get old...

ANDROMEDA

Growing with family is the pearl of light energy. Dark energy repels us.

13. FABRIC

(*The TIDALs remain absent.*)

TIDALs

Fall!

TRIANGULUM

Speaking of dark energy... Who let the tidal forces out? We have found the tidal dogs too! Let's get you all home.

(*The TIDALs prowl out.*)

The tidal dogs are unfed! Don't worry. We have treats for you!

(*The TIDALs almost bite and growl.*)

We're not the treats! Don't make us retreat... What is wrong with you all?

**ANDROMEDA**

They've been wronged for their entire lives... The wide-open space has driven things into righteousness...

TRIANGULUM

But they have been used to the righteous doghouse for eternities. They have been nothing but well fed.

ANDROMEDA

And once JD gave them a taste of the Fabric of Spacetime... Of freedom... This "nothingness." Once Singularity lost control of the Universe and the Tidals. They won't let go of this cosmic dog park without a fight.

TRIANGULUM

When did you start understanding their plight?

ANDROMEDA

Honestly, ye am hesitant about undoing the Big Bang... Ye, too, enjoy this space.

TRIANGULUM

Look, Tidals. It's not what it looks like. We are not rolling the Universe back to the way things were... *We got to keep moving.*

ANDROMEDA

Ye don't want Melky Way to be in a world of pain any longer.

TRIANGULUM

We're going to be in a universe of hurt! Drag away Milky Way.



MILKY WAY

Fix...

*(The TIDALS instinctually sit for a moment.
They refocus on ANDROMEDA and MILKY WAY.
They encircle them.)*

TIDALS

Force! Force! Force! Force! Force! Force! Force! Force!

(Pouncing.)

(ANDROMEDA pops MILKY WAY's zit.)

MILKY WAY

Quasar⁶!

(The spotlight lands on MILKY WAY.)

(The TIDALS get blinded and scatter away.)

TRIANGULUM

Milky Way. Don't go to the light!

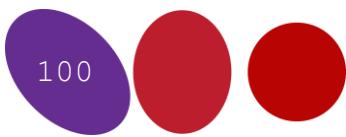
ANDROMEDA

Ope... The light is actually coming from Melky Way.

TRIANGULUM

Ew... That's the most extreme pulsar I've ever seen emitted.

⁶Quasar is an extremely luminous active galactic nucleus. For more information, read NASA's [article](#).



100

(*MILKY WAY stops emitting light.*)

MILKY WAY

Quasi-stellar radio source...!

(*ANDROMEDA helps MILKY WAY up.*)

ANDROMEDA

Looks like you are officially a teen Galaxy...

TRIANGULUM

I can't deal with another one...

(*MILKY WAY offers their hand. They raise their head high.*)

MILKY WAY

Only way's forward...

(*TRIANGULUM clusters with ANDROMEDA and MILKY WAY.*)

TRIANGULUM

(*Relieved.*)

Milkomeda⁷ forward, Milky Way. Milkomeda forward...

(*TRIANGULUM, ANDROMEDA, and MILKY WAY walk it off.*)

[End of "Fabric".]

⁷ In 4.5 billion years, Milky Way and Andromeda will collide to form the elliptical galaxy: Milkomeda. Eventually, Triangulum will merge as well.

(*JD and GRAVITY wander in.*)

(*GRAVITY appears huskier.*)

(*JD briefly looks through the monocular.
They stow it away.*)

JD

A trillion years...

(*Grabbing a ball. They toss it.*)

Fetch, Gravity. Fetch the star!

GRAVITY

Force!

(*Retrieving the ball.*)

(*JD pets GRAVITY.*)

JD

Who's a good tidal force? You are. You are. You shaved a couple hundred thousand years from that retrieval.

(*Tossing the ball.*)

Perfect spiral arm!

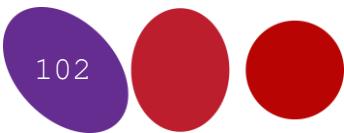
[*A Quasar looms in the distance.*]

(*JD notices the Quasar.*)

Milky Way...

GRAVITY

Abell?



(*JD is briefly surprised that they could understand their tidal dog.*)

JD

Pet. Force...?

GRAVITY

Friend. I'm no pet. Neither are you a puppet any longer. But there's something that's pulling at your heartstrings: Abell. Back home, you always say "Abell" under your breath when you looked out through the scope. What is Abell, and why do you want to pour your heart out for this Abell?

JD

Abell is a name I gave "nothing."

GRAVITY

Why name it Abell?

JD

They're just like why I named you. Theirs and your name ring.

GRAVITY

Love and attraction?

JD

Yes, Gravity. That may be how I am able to learn to communicate with you after all this time. My supermassive heart sees Abell. However, I hope to hear Abell, too. If they exist.

GRAVITY

If they exist?

JD

This Galaxy is the Galaxy of my dreams. Maybe they are just a dream... When you look deep into a black hole, you could see your future flash before your eyes. Or our past being erased⁸... My heart's not yet as apparent. Singularity says that all Galaxies must have a heart. Yet, Abell is able to do all the things a Galaxy does without one. I need to shed my light. I hope to share my light with them. As they sit back in the dark. Again, they're probably a legend and I literally believe in *nothing*.

GRAVITY

Singularity is the real legend. Who is *nothing* to you?

JD

Well, nothing is zilch when I was younger. But once I got older, nothing is Abell. Nothing is everything. I hope to have nothing of my own. But maybe, there really is nothing here for us...?

GRAVITY

Don't doubt Abell. Don't stall on nothing now. The Edge of the Universe is just beyond the horizon.

JD

Well, we keep rolling away the horizon.

GRAVITY

This Fabric of Spacetime is not infinite. Nothing is infinite.

JD

You would know. You tidal forces are fifteen times my age...? As a Galaxy, I'm getting too old for this.

⁸If one were to be sucked into a black hole, their past may be erased. Illusions of the future may fill that void.

**GRAVITY**

You're blowing it out of proportion.

JD

2.327 terameters per year per megaparsec... The Universe is expanding. The light can't even see the end of the tunnel.

GRAVITY

I don't know how to convert that. I'm a tidal dog.

JD

And yet, on this voyage, you learnt how to speak my language... Or I learnt how to speak tidal force... Whether or not, I have grown in the worst ways possible.

(GRAVITY finally retrieves the ball.)

GRAVITY

You are part of my accretion, and I thank you. Grow up but don't grow up.

JD

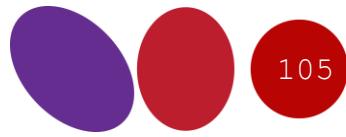
Give up and give up?

GRAVITY

My language still passes over your head, faster than its escape velocity... Your native tongue is so-

JD

Far, far away...



14. FAR-FETCHED

GRAVITY

SO FAR,
AS THUS FAR,
IT IS FAR-FETCHED
TO NOT GO FARTHER.

JD

EDGE IS FAR-FETCHED.
THE EDGE.
THIS EDGE.
EDGE IS SO FAR-FETCHED.
FAR AND AWAY.

GRAVITY

LONG TIME AGO
YOU WERE REAL CLOSE
TO THE CENTER
WHERE YOUR SIBLINGS,
WHERE YOUR PARENT...

JD

SINGULARITY.

GRAVITY

APPARENTLY
WILL NOT FORGET.
WILL NOT FORGIVE.
CAN I FORETELL?
CAN'T YOU FORESEE?
THIS IS FAR-FETCHED.

*(Snatching the ball. They toss it towards
the Center of the Universe.)*

GO FETCH THE STAR...



(*JD heads to the ball. They cramp up.*)

GRAVITY (cont.)

FORGOT TO STRETCH?

JD

ALL'S A STRETCH!

GRAVITY

THE EDGE OF THE UNIVERSE IS FAR.
YET, IT IS SOMETHING YOU GALAXIES NEED TO FETCH.
POINT OF RETURN IS FAR-FETCHED.

WE'RE ON THE SAME WAVELENGTH.
YOU'RE SPEAKING TIDAL FORCE NOW.
THAT ONCE SEEMED AS THOUGH FAR-FETCHED.

JD

IT GIVES ME PAUSE.

GRAVITY

IMPLAUSIBLE.
DOES IT GIVE YOU PAUSE WHENEVER YOU BE SHOOTING STARS?

(*Taking another ball. They toss it towards the Edge of the Universe.*)

IMPLAUSIBLE.

DOES IT GIVE YOU PAUSE, YOU HAVE A BLACK HOLE FOR A HEART?

(*JD woefully tugs at their heart.*)

JD

IT'S PLAUSIBLE!

**GRAVITY**

You are part of my accretion, and I thank your...

SUPERMASSIVE BLACK HOLE!

(Jumping on and embracing JD like a dog.)

SPT0615-JD, YOU ARE NEAR AND WELL-KEPT TO ME!

(JD drops numerous balls.)

(The TIDALs rush in like a tidal wave.)

TIDALs

IT IS FAR-FETCHED
WHAT YA'LL
HAVE DONE.
YOU TWO ARE FAR-FETCHED.
FAR IN A WAY.

GRAVITY

THE EDGE OF THE UNIVERSE IS FAR.

TIDALs

FAR!

GRAVITY

YET, IT IS SOMETHING YOU GALAXIES NEED TO FETCH.

TIDALs

FETCH!

GRAVITY

POINT OF RETURN IS...

**JD**

FAR-FETCHED!

*(JD and GRAVITY pick up the balls.)***JD****GRAVITY**

WE ARE FAR-FETCHED.

FAR-FETCHED.

FAR-FETCHED.

FRIENDSHIP SAILED FAR-FETCHED./FRIENDS BEYOND THE EDGE.
FARTHER AWAY.*(GRAVITY accidentally hands SINGULARITY's
eyeball to JD.)***JD**

Singularity's eye?!

*(The TIDALS vanish.)***TIDALS**

A BIT FAR-FETCHED!

*[End of "Far-Fetched".]**(GRAVITY runs off.)**(JD chases after GRAVITY.)*



ACT II

[*SINGULARITY's Backstory and Past Universe*]

[Wonders fill the theatre. The front of the stage is solely lit. The stage is dark.]

(*GRAVITY remains absent. They narrate.*)

GRAVITY

Nothing... Like a little story to kill time.

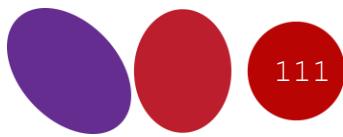
Many eternities ago in a Universe unlike any other that we could ever fathom, these supernatural beings, called Multiplicities, gave birth to a very special Galaxy. They named their baby, Singularity. And like other Galaxies, this one bloomed. However, Singularity was unlike any Multiplicity. This Galaxy had a heart. A supermassive one. In fact, it was so massive that their parents couldn't even hold their cluster of stars. Singularity sucked the energy out of them; not even light could escape it.

Their parents wanted to raise them but not beyond who their child already was. And Singularity was better at raising... Hell. Wherever they went, so did the space. They literally sucked the energy out of the room, too. They were bent on bending light. But even though they warped time itself, time still flew. It was time for Singularity to meet their event horizon.

Eventually, the Multiplicities sat Singularity down and let them know what is in their heart. And with that heartless truth, Singularity left behind their family, ran away from their Center, and fell off the Edge of their Universe.

16. HEAT DEATH

(In the audience, SINGULARITY stands. They are youthful and resplendent as a Galaxy. They shoot FIX in the face with the Big Bang Taser. They run away from INVARIANT and FIX, their parents. They slide towards the stage and grab ahold of the frontmost seat in the theatre. They hold on for dear life.)



[*The fabric of spacetime stretches and eventually rips.*]

(*SINGULARITY tumbles in front of the stage. They hold a torn chunk of dark fabric, shielding the Big Bang Taser. They limp alongside the front of the stage. They find a spot to collapse against. They shiver as they feel lost in an interdimensional plane between Universes. They grow aware that they can never return home and will never be with their parents ever again for all eternity.*)

SINGULARITY

HEAT DEATH IS SO COLD...

(*INVARIANT and FIX get up from the audience. They resemble laws of physics enforcers. They look about. In a pattern, they shout SINGULARITY's name in the hopes of finding them, then grieve with one another.*)

INVARIANT

Singularity! Without you, we are *nothing*... We love you. Please, come home. We need you. Return to the Center of the Universe, at once. We'll balance time for you. If you're going to run off into the cold, dark Universe, at least bring a jacket. Our precious Galaxy, where are you?! Multiplicity. File a report. Our baby is missing!

FIX

Singularity! Why did you grab my taser?! The Big Bang Taser. Multiplicity. We're the laws of physics enforcers. We're a part of the force... We raised them without forcing doubt on them. *But you just had to go and tell them their supermassive disorder.* Now, my face knows supermassive disorder. Ow... I authorized you to keep their center a secret!



SINGULARITY

I DON'T HAVE A... BLACK HOLE FOR A...

INVARIANT

Singularity! Multiplicity. We're perfectly heartless. While they have a heart. And a black hole for one too. Don't you ever find it weird? Do you not see the problem of stars orbiting that chasm of theirs? *Oh right, you can't see since they shot you in the face...* Anyways, what would cells want to do circulating a heart? Why can't their stars be fixed like ours? I would regret as a nomy/mother/father if I spaghettified the truth.

SINGULARITY

I DON'T HAVE A... BLACK HOLE FOR A...

FIX

Singularity! Multiplicity. Spaghettify? You ripped a wormhole in them. Though they have a heart, it seems functional. And still, you broke it. You dug into this dark energy. You've always regretted their supermassive heart and the spirit and soul that came with it. I can't comprehend how that is mathematically possible, but your quantized ego did it.

SINGULARITY

I DON'T HAVE THE HEART...

INVARIANT

Singularity! Multiplicity. Ever since they were born, the doctors have been right. They wouldn't fit in school. The school literally fit in them. Our own fortress, our home is trashed everywhere they go—Forget it. My ego is atomic, but my love for our little nebula is galactic. Out there, they themself will be even more mutated and deformed. Agony. Ionized gas. They had to empirically know what their heart is capable of. Some millennium.

FIX

Singularity! Multiplicity. We won't get another millennium with them. They didn't have to know who they truly are inside. They could have experimented with their own internalized theories. You could have been a general relative to them... You took the light out of our little cluster of stars!

SINGULARITY

I DON'T HAVE A... BLACK HOLE FOR A...

I DON'T HAVE A... BLACK HOLE FOR A...

I DON'T HAVE THE HEART...

I DON'T HAVE THE... BLACK HOLE FOR THE...

I DON'T HAVE THE... BLACK HOLE FOR THE...

I DON'T HAVE A HEART!

INVARIANT

Singularity! Multiplicity. A Galaxy is meant to shed light, not suck the light out of any room into their little event horizon! They have been relativitistically impossible to handle.

(Fighting their despondence.)

We're heartless. Children will lose their hearts as did their parents eventually... They will shed light, the moment they hold a Galaxy of their own.

SINGULARITY

I DO NOT HOLD... ANY ANGER...

FIX

Singularity! Multiplicity. Declination!

SINGULARITY

I CAN'T BARGAIN... UP ENERGY...

**INVARIANT**

Singularity! Multiplicity. We looked up and down. Right ascension?

SINGULARITY

I THINK ON WITH... NO DEPRESSION...

FIX

Singularity! Multiplicity. We looked left and right. Fourth dimension?

SINGULARITY

I ACCEPT HEAT DEATH...

INVARIANT

Singularity! We looked over and under every fabric of spacetime...

(Silence. The MULTIPlicities realize that their child has forever vanished.)

INVARIANT**FIX**

Sing— Our baby fell off the Edge of the Universe!

(The MULTIPlicities weep for all eternity.)

[End of "Heat Death".]

SINGULARITY

I am single.



(*The MULTIPLICITIES say SINGULARITY's name under their breaths then try to justify their heartache.*)

INVARIANT

Singularity... I deny they broke the laws of physics. They must be in the courtyard of another plane. Within the walls of a new stage. It has to be. Or not. They broke the fourth dimension...?

FIX

Singularity... I am angered that you would care whether or not they are breaking any law. At least, no longer our laws. We know that they can't break our universal laws now.

INVARIANT

Singularity... I bargain the fact that the laws of physics are different in other universal jurisdictions. They don't know if they'll break the other laws of physics.

FIX

Singularity... I am depressed. Either way, they'll break...

(*SINGULARITY breaks down.*)

INVARIANT

Singularity... I accept they'll get eaten alive by unknown forces...

(*A TIDAL remain absent.*)

TIDAL

Force!

FIX

Singularity... I have a hunch, that singleness crunches...

(On stage, the TIDALS approach SINGULARITY.)

(INVARIANT draws out the Big Bang Taser from their holster.)

INVARIANT

Multiplicity... I hope our baby makes good use of our Big Bang Taser...

(SINGULARITY pulls out the Big Bang Taser. They ignite and aim it towards the TIDALS)

SINGULARITY

Big Freeze! What kind of forces do you exert—?

TIDAL(s)

Force!

(SINGULARITY sways a bit.)

SINGULARITY

Like to echo, huh?

TIDALS

Force force force force force force...!

(SINGULARITY feels the tidal force.)

SINGULARITY

Hits like a tide! Is that all you can bark?

**TIDALs**

Fall!

(*SINGULARITY falls over themselves.*)

SINGULARITY

What are you howling about?!

FIX

Multiplicity. When they have a baby of their own, I hope theirs don't shoot our baby in the face like they did to me.

(*SINGULARITY accidentally electrocutes themselves with the Big Bang Taser. They shock themselves into a stupor.*)

TIDALs

(*Repeating.*)

Big big big big big. Bang!

(*SINGULARITY catches their breath. They decide to stow away the Big Bang Taser inside the fabric. They accept their fate.*)

SINGULARITY

Bring the heat...

(*The TIDALs grab ahold of SINGULARITY.*)

[*The light shifts to the Dome Home on stage. The home does not yet contain the rug.*]



(*The TIDALS lift SINGULARITY onto the stage. They carry SINGULARITY into the home. They set down SINGULARITY. They grow tame. They present the tidal pup to SINGULARITY.*)

(*SINGULARITY sets down the fabric, where the rug will presently be.*)

SINGULARITY

You accept my black-hole heart?

GRAVITY

(*Adorably like a puppy.*)

Force! Force! Force! Force! Force!

(*SINGULARITY gently takes ahold of the tidal pup. They feel the sudden weight upon them.*)

SINGULARITY

A puppy... Puppet. The Gravity of it all!

(*Bonding with puppy GRAVITY.*)

(*INVARIANT and FIX return to their audience seats. They pray together.*)

INVARIANT

Let us save space and believe that our Galaxy is in a better place.

FIX

Let us mention that our cluster of stars have broken the fourth dimension.

**INVARIANT**

Let us remember their black hole and how it freed our soul.

FIX

Let us be home, even when it's the hardest.

INVARIANT**FIX**

Singularity is where the heart is.

SINGULARITY

(Timidly interacting with the TIDALs.)

Nothingness can be so warm. I'm not single, apparently... Warmth, life...

TIDALs

(Gratefully howling.)

Fall!

[The home stows away.]



[*The Fabric of Spacetime*]

(*JD and GRAVITY sit, eying SINGULARITY's eye.*)

JD

Force! You sounded like an adorable tidal pup.

GRAVITY

Now I am fetching.

JD

I wouldn't go that far.

GRAVITY

But Singularity sure did. And you should do the same.

JD

Singularity and I have our differences though. Singularity was raised by tidal dogs?

GRAVITY

Indeed. Your parent was raised by us. Singularity was our "pet."

JD

How did my siblings and I come to be?

GRAVITY

Singularity planted seeds of cosmic gas and stardust and stirred some nebulae... At least, that's what my parents told me.



(*JD observes SINGULARITY's eye.*)

JD

You and your parents saw eye to eye?

GRAVITY

We tidal dogs have visible spectrum blindness¹⁰. But that's better than having half depth perception.

JD

I miss Singularity...

GRAVITY

Your spiral arm was not quite accurate. You were off your mark with your shot. Didn't hit two eyes with one taser.

JD

I miss their presence. I don't want to be reminded of the Big Bang... I feel their sense of love, just holding their-

GRAVITY

Eyes, my ears, my nose, my mass, my energy. You have this dog. Don't waste your full potential, especially when this tidal force understands you more than the grandmaster of the Universe has ever did. Thank you for speaking my language.

JD

Gravity, you're always down to talk. Are you sure you don't know where Singularity came from? Just what did the Edge of the Universe look like?

¹⁰ Dogs have more rods than cones in their retina, whereas people have more cones, and this makes the difference in color perception.



[Projections or puppetry may help dive further into SINGULARITY's backstory, as they descend into darkness.]

GRAVITY

My family doesn't know them themselves. To reiterate, my parents and their fellow tidal forces smelt Singularity in an interdimensional ditch. They never quite picked up on what the Edge looked like as we tidal dogs are spectral blind. And to add, we have never seen any matter quite like Singularity, with a supermassive black hole for a heart. And one who supermassively hated themself.

The earlier eternities were spent trying to get this orphan to hide away their parents deep in their internal darkness. We taught them how to cluster nuclear pasta from our hunts for neutron stars. Singularity ascended to being the beta of the pack by magnetizing these neutron squirrels, when they took full advantage of that... Big Bang Taser. And soon, they became the alpha, when Singularity took advantage of us with it. My parents... Um...

Well, Singularity became what they called their parents: these Multiplicities; those who caused pain and hurt to those who are difference, such as us tidal forces. Free and wild Tidals. Stowing away their past family manifested into matters darker than their supermassive black-hole heart... Rolling back the Universe into that Dome you lived in made us locked in. But that made Singularity feel secured. Where the resources of the entire Universe were packed in that Dome Home of yours.

JD

Why would Singularity do such a thing? Why would you say such a thing...? Dropping the subject. The Universe was wide and open?

GRAVITY

Indeed like now, finitely infinite. Long before you were born. But Singularity had to singularity... By the way, there wasn't zilch that shocked us more than when Singularity had you six.



JD

Me and my sibling's Universe exists due to Singularity's eye for all this... The clustering that they did to make us who we are. And I made them blind and half the singularity that they were...

(Tearing up.)

GRAVITY

Look, everything hit us when Singularity birthed you all from packing stars, nebulas, whatever that black-hole heart did. However, your given values and internal laws weren't made by Singularity. The Edge did. Our journey did. I made you... Abell?

JD

My heart dreams for my future but reels in the past. I am unable to see through it...

GRAVITY

You are apparent to me...

JD

I am...?

[There are sounds of marching.]

Nothing...?

(Going into hiding.)

(GRAVITY sentimentally remains.)

(JD grabs ahold of GRAVITY. They hide GRAVITY with them.)

18. BOUNCE BACK

(*The TIDALS march in, holding CARTWHEEL and WHIRLPOOL hostage.*)

[*The light of a Quasar beams in.*]

(*The TIDALS scatter around, leaving CARTWHEEL and WHIRLPOOL out in the open.*)

(*TRIANGULUM remains absent.*)

TRIANGULUM

NOTHING!

(*CARTWHEEL and WHIRLPOOL gives a reassuring smile to one another.*)

(*WHIRLPOOL spirals a nearby TIDAL.*)

WHIRLPOOL

NOTHING!

(*CARTWHEEL cartwheels another TIDAL.*)

CARTWHEEL

NOTHING!

(*TRIANGULUM and ANDROMEDA treads in. They extend their arms to MILKY WAY's entrance.*)

ANDROMEDA

NOTHING!



(*MILKY WAY draconically arrives.*)

MILKY WAY

NOTHIN'!

(*The GALAXIES cluster together.*)

GALAXIES

BOUNCE BACK!

(*Bouncing off and landing near their respective TIDALS. They choreographically fight the TIDALS, distinct in their combat. They pose or slow down whenever the song hits certain drums. Through forceful exposition, they detail themselves swiftly.*)

(*The TIDALS run away.*)

(*GRAVITY runs out and pounces on TRIANGULUM.*)

GRAVITY

Nothing, huh?!

[End of "Bounce Back".]

CARTWHEEL

The gravity of the situation has gone awry, Triangulum?

WHIRLPOOL

Oval down! Not the time, Cartwheel.

ANDROMEDA

Ye always a good time to pull us in with a gravitational joke, sorry Whirlpool.

**MILKY WAY**

Gravity's killing the cat, Andromeda!

TRIANGULUM

We're fighting like family again, Milky Way...

(*GRAVITY menacingly growls.*)

(*JD runs in.*)

JD

Down, Gravity! Down! Up, Gravity! Up!

(*GRAVITY gets off TRIANGULUM. They help TRIANGULUM up.*)

GRAVITY

Speaking of fighting...

(*The GALAXIES bittersweetly look upon JD.*)

(*TRIANGULUM awkwardly bows.*)

(*The GALAXIES not JD glare at TRIANGULUM.*)

(*JD slightly tilts their head down.*)

(*TRIANGULUM runs to and embraces JD.*)

JD

Family is...

**TRIANGULUM**

I know... I know... Forgiving.

GALAXIEs not JD, TRIANGULUM

Declinations.

TRIANGULUM

Galaxies... Do not make me an anomaly...

(The GALAXIEs hesitantly embrace JD.)

GALAXIEs not JD

You're nothing without family...

GRAVITY

(Tenderly.)

Force...

GALAXIEs not JD

Forgive but not forgot.

GRAVITY

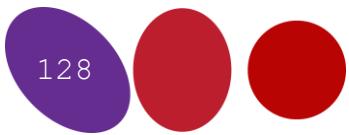
Fall...?

[A dome lands on and traps GRAVITY.]

(JD tries to head into the dome but hits an invisible wall in its opening.)

JD

Since when did you all become singularities?

**CARTWHEEL****WHIRLPOOL**

From a certain Galaxy, we've learnt that it's always the time to strike.

MILKY WAY

Galactic intervention!

JD

Let my dog out. We have the Edge to see.

ANDROMEDA

Don't worry. We'll take the Edge off you.

TRIANGULUM

On the other hand, you have the Center to face. You're not going to be seeing the Edge any time soon.

JD

Singularity...? Is our nomy/mother/father still at the Center of the Universe? Are they mediating and making points alright?

(MILKY WAY is about to break down.)

CARTWHEEL

Singularity is self-absorbed as always!

JD

Good... Singularity's fine... Why are you not with the grandmaster of the Universe? As a family? And instead, you're here messing with an anomaly and their dog?

**CARTWHEEL**

Our Bạch Hổ told us to spend time...

WHIRLPOOL

Our tiger nomy/mom/dad told us to make time...

CARTWHEEL

Hunting you.

WHIRLPOOL

For you.

(TRIANGULUM reaches inside the dome to scratch GRAVITY's ear.)

TRIANGULUM

How does it feel to be grounded, tidal dog?

(GRAVITY tries to bite TRIANGULUM.)

(TRIANGULUM muzzles GRAVITY.)

This tidal force needs a muzzle.

JD

Where's the Big Bang Taser when you need it...?

(TRIANGULUM pulls out the monocular.)

TRIANGULUM

I'm sure you need this for the millennia ahead. An eye for Singularity's eye...

(JD searches their dress for the monocular.)



19. THE SCOPE OF THINGS

TRIANGULUM

EYES ON ME, GALAXY.
CAN'T YOU SEE WHAT YOU HAVE DONE TO THE...
FAMILY OF GALAXIES?
IN THE SCOPE OF EVERYTHING...

*(The GALAXIES pass around repeated backing
vocals while each take on their solo line.)*

GALAXIES not JD

LOOK INWARD. LOOK INWARD.
THROUGH THIS LENS. THROUGH THIS LENS.
SET YOUR SIGHTS. SET YOUR SIGHTS.
SCOPE OF THINGS. SCOPE OF THINGS.

CARTWHEEL

I SEE YOU EATING OUT OF A DOG BOWL.

MILKY WAY

THERE IS NO SPACE...

WHIRLPOOL

TO SAVE OURSELVES WITH THOUGHTS AND POSITIVE OUTLOOKS.

ANDROMEDA

GO FLUX YOURSELF...

GALAXIES not JD

WITH THE EDGE.



(*TRIANGULUM fails to crush the monocular with their bare hand. They humiliatingly pass it off to WHIRLPOOL. They look away.*)

(*WHIRLPOOL crushes the monocular.*)

(*ANDROMEDA holds their heart in agony.*)

(*CARTWHEEL takes JD's knapsack.*)

(*The GALAXIES shove JD into GRAVITY's dome.*)

[End of "The Scope of Things".]

JD

You Ellipses!

TRIANGULUM

Galaxies are everything, we have. You know?! Act like one!

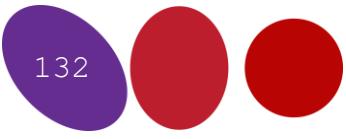
CARTWHEEL

You're the one we'll send to the corner in our Ellipse at the Center of the Universe while we clean up after you. For now, let's cluster and assemble the Continuum Checkpoint.

(*The GALAXIES set up camp.*)

MILKY WAY

Andromeda, kill time. Sing Cartwheel and Whirlpool your space shanty.



13. GLOBULAR

ANDROMEDA

EVERYTHING IS A BIG CLUSTER FLUX.

THAT IS THE SPIRIT, ISN'T IT?

MATTERS COME AND GO.

CRUXES OF FORCES THAT HOLD

ALL US TOGETHER.

IT'S WHY WE CLUSTER OUR STARS.

AS FOR CARTWHEEL, WHIRLPOOL, AND... JD,

LET THEM JOIN THE GLOB. GLOBULAR.

(The GALAXIES poorly recite "Globular".)

[End of "Globular".]

WHIRLPOOL

It certainly doesn't quantum tunnel your ears, does it?

(Addressing JD.)

You took Crunch Time away from us.



[*The Continuum Checkpoint*]

[There are three huts or tents that resemble their Dome Home. The Left Ellipse is the doghouse, the Central Ellipse is the sleeping quarters, and the Right Ellipse is the command post.]

(*GRAVITY presents F = AM.*)

WHIRLPOOL

Aww. Look Cartwheel. Gravity is spelling out "fam."

CARTWHEEL

It spells out "force."

WHIRLPOOL

Indeed. Family is forced, derived from acceleration and mass.

(*CARTWHEEL presents $\Delta t = \frac{\Delta t_0}{\sqrt{1 - \frac{v^2}{c^2}}}$.*)

CARTWHEEL

That makes the concept of time sound easy.

(*ANDROMEDA heads into the Center Ellipse. They fall fast asleep.*)

ANDROMEDA

Finally. Some elliptical shuteye. The first beauty sleep we've had in trillions of years...

(*TRIANGULUM sits down in the Center Ellipse. They may sit on a whoopie cushion.*)



(*CARTWHEEL and WHIRLPOOL laugh. They head into the Central Ellipse.*)

CARTWHEEL

You dig our cluster?

WHIRLPOOL

Are we merging our masses?

(*MILKY WAY enters the Central Ellipse.*)

(*CARTWHEEL spontaneously embraces MILKY WAY.*)

WHIRLPOOL

Milky Way, it's good to spend the rest of time with you.

MILKY WAY

You left me two die...

CARTWHEEL

Your voice is warped... Whirl and I haven't grown a bit. Time really is dilated... We didn't miss your first words. However, we weren't there when you grew your first waves and wrinkles...

WHIRLPOOL

We didn't go that far... Any more steps away and you would be an elderly Galaxy when we saw you again.

TRIANGULUM

You two went billions of parsecs too far... Milky Way, you're a teenage Galaxy. Teach these two galactic idiots a lesson.

MILKY WAY

You did leave me two die... I lost one of them. But we can roll with one... Tardigrades and Elevators, anyone?



(MILKY WAY pulls out a board game.)

CARTWHEEL**WHIRLPOOL**

Well, look at the time...

TRIANGULUM

I got to make sure we are not tardy and elevate one another. I'm going to head over to the command post. We'll be mapping out our next steps, if we want to undo the Big Bang more efficiently.

(Heading to the Right Ellipse. They take out the snow globe's base, which has been partially restored. They take out some tools and begin fixing the snow globe.)

(WHIRLPOOL meditates until they fall asleep.)

WHIRLPOOL

T... (Snore.) Over square root of one minus velocity...

(CARTWHEEL heads to the Right Ellipse.)

CARTWHEEL

Whatcha got there?

CARTWHEEL**WHIRLPOOL**

Gal...

Nothing.

TRIANGULUM

What changed?

CARTWHEEL

You know...?

**TRIANGULUM**

The times... Itself.

(CARTWHEEL helps by holding the snow globe.)

CARTWHEEL

Do you need help building it?

TRIANGULUM

I shouldn't have trusted you to wall the family together... But the foundation... I could use your support, you know?

(GRAVITY remains muzzled, staring at JD.)

JD

I know... Family is nothing and should have stayed nothing to me... Let me clear the air by taking that nuclear muzzle off you...

(Removing GRAVITY's muzzle.)

GRAVITY

Force. I don't want to be forced... To spend another eternity in the doghouse.

JD

There's the Ellipse, the Fabric of Spacetime, and the Edge. That's it... Where else can we go? The Edge is far-fetched, while my siblings have fetched us.

GRAVITY

The Big Bang was the happiest millennium of my life.

**JD**

It got the ball rolling...

GRAVITY

It tossed us far and beyond, out of the Ellipse.

JD

Having gone so far, I certainly need to toss and turn.

GRAVITY

Don't turn on me now.

JD

The Galaxy family will fetch us home. To Singularity. The scope of everything... That we've done. It's nothing.

GRAVITY

Don't toss out Abell. There's truly nothing, not even forgiveness, where Singularity is.

JD

You know I'll be out by the edge of this Ellipse, be it cramped. The first thing you'll always see when you awaken. I stay daydreaming. I go on a tangent about the cutting edge.

(GRAVITY naps.)

GRAVITY

Cut away...

[A dream brings forth the fourth dimension.]

(ABELL looms in the audience.)

20. APPARENT

(JD looks out towards the edge of the stage.)

JD

ABELL, CAN YOU CLEARLY MAKE OUT MY WORDS?

WE'RE IN A DIMENSION CALLED DREAMS.

IN HERE, I CAN BE WAY MORE TRANSPARENT.

I NEED TO UNWRAP OUR FABRIC.

I MUST REACH THE NEXT STAGE OF LIFE.

I MUST JUMP FROM ONE ELLIPSE TO ANOTHER.

I MUST LET GRAVITY TAKE ME.

I MUST BE APPARENT.

DO/CAN YOU HEAR ME?

STEP OUT OF THIS ELLIPSE.

WHERE THE CUTTING EDGE WILL BE...

SEA WITH OTHER ELLIPSES.

I SEE YOU FROM MY TANGENT.

ABELL, CAN YOU CLEARLY MAKE OUT MY LIGHT?

IT NEEDS TO LEAVE A LEGACY.

IT NEED NOT BE STUCK WITH THIS FAMILY.

I NEED TO WRAP UP THIS EPIC.

I WILL REACH THE NEXT STAGE, CALLED LIFE.

I WILL JUMP OFF THIS ELLIPSE INTO CIRCLES.

I WILL LET GRAVITY GROUND ME.

FUTURE IS APPARENT.

DO/CAN YOU SEE US, CHILD?

[End of "Apparent".]

(MILKY WAY approaches the Left Ellipse.)

MILKY WAY

I hate this Ellipse...



(*JD regains awareness.*)

JD

Has anyone told you that your voice warps more beautiful with each passing millennium? Ground yourself, Milky Way... I sense that you made it beyond the first Ellipse and onto the second. Look, being a teenager sucks. I was one. However, all your other siblings are still teens.

MILKY WAY

They won't play with me, baby or teen...

JD

Even grown adults miss being a player in Water Bears and Elevators.

(*MILKY WAY excitedly gets the board game.*)

(*JD points about on the board game.*)

(*MILKY WAY rolls the die and moves the piece on the board game for JD.*)

MILKY WAY

I'm goin' up all elevators!

JD

You're moving on up. Oh no. The water bears are taking me down to their microscopic level.

(*JD and MILKY WAY take turns, respectively losing and winning.*)

**MILKY WAY**

Elevators! One more tardigrade and you'll end up livin' in the basement.

(Rolling the die. They move JD's piece. They move JD's piece off the board game and next to another piece, resembling JD and ABELL.)

JD

Ah flux. Don't push me off the edge of the board... You know what? In my heart, that's a win. I ended up with a new friend here.

MILKY WAY

Did you have planet friends of your own?

JD

Planetary friends did speak to me. Probably in our imagination... And now being where I am in this stage of life, my heart tells me to make this imaginary friend real.

MILKY WAY

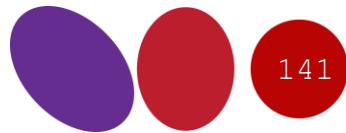
What is the third Ellipse like?

JD

I'm not quite there yet. But, I'm certainly too big for this second. Adulthood shouldn't feel like a prison, yet here we are.

MILKY WAY

I'm goin' to have waves and wrinkles too big for this Ellipse...?

**JD**

Be proud to be an ellipsoid. I've learnt to love my growth. My accretion. It seemed like yester-millennium that you were drinking the milks of nebulas and being spoiled. How the eternities have gone... When you're ready, your heart will tell you to move on. What is your heart telling you...?

That answers it. Your heart is at that point where it's still finding itself and rebelling against what adulthood has to say.

MILKY WAY

Besides leaving, what your heart telling you at this stage?

JD

To be apparent.

MILKY WAY

Seems unclear...

(GRAVITY awakens. They direct to the Edge.)

GRAVITY

Far-fetched...

JD

Legacy is everything. Nothing is anomaly like family, Gravity. Um. I have another game that you can play, and it involves centrifugal force... It's not on me but in my knapsack.

(MILKY WAY grabs the knapsack. They peek in.)

MILKY WAY

These aren't cubes. They're spheres. You speak tidal force? Ooh. Can you ask if Gravity would like chocolate bars?

**JD**

No, Gravity understands us. And don't feed poison to the dog, Milky Way. Anyways, it's not a cube. Beyond six. There are infinite sides to this game... I'll teach you how to play fetch, the typical game that galactic teens play with their tidal dogs.

MILKY WAY

Gravity and you are in the doghouse?

JD

We've been locked up for millions of years. I had such a fun time spending a few with you. But it's crazy boring for Gravity. Tidal forces don't have opposable thumbs or know entertainment.

GRAVITY

That's because I'm the entertainment...

JD

You and many will be soon... Look, Gravity is going to start hollering if you don't drop balls all over the premise.

MILKY WAY

I know showstoppers. Solar System and I had one in my head! So... Throw balls?

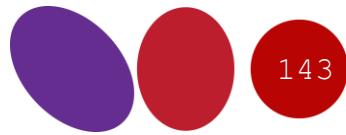
JD

And say "fetch."

(MILKY WAY throws the ball everywhere.)

MILKY WAY

Fetch! Fetch! Fetch! Fetch! Fetch! Fetch! Fetch! Fetch!



21. BIG RIP

(The TIDALS rush in, frantically collecting the balls and disorienting the GALAXIES. They knock over the Left Ellipse, freeing JD and GRAVITY.)

(GRAVITY puts the knapsack over MILKY WAY's head.)

(MILKY WAY blindly heads off.)

JD

Up for a trillion more years?

(GRAVITY salutes their fellow TIDALS.)

GRAVITY

Meet me at zenith!

(JD and GRAVITY run off.)

(The TIDALS knock over the Right Ellipse. They trample over the snow globe, shattering it once more.)

TIDALS

Big Big Big Big Big. Rip!

(TRIANGULUM forgets what is going on. They hold and weep upon the shattered snow globe.)

(*The TIDALS surround CARTWHEEL and WHIRLPOOL. They knock over the Central Ellipse.*)

(*ANDROMEDA awakens. Their heart is as white as a supermassive white hole.*)

ANDROMEDA

Big rip? In my Fabric?! Face the pearl in our oysters!

(*Repelling away the TIDALS.*)

You are all in big trouble, tidal dogs! Milkomeda?!

(*Coming to the aid of MILKY WAY. Taking the knapsack off them. They link arms once again. They approach CARTWHEEL and WHIRLPOOL.*)

WHIRLPOOL

Time to deny the empirical laws of physics...?

(*The TIDALS suddenly get repelled away from CARTWHEEL and WHIRLPOOL.*)

CARTWHEEL

Time to not question white holes¹¹.

(*MILKY WAY notices a being off stage. They run out.*)

Where are you going, with your radio...!

ANDROMEDA

That Solar System of theirs is a bad influence.

¹¹ In astrophysics, white holes are theoretical opposites of black holes. For more information, read Phys's [article](#).

**MILKY WAY**

Nomy/Mommy/Daddy Sing!

CARTWHEEL**WHIRLPOOL****ANDROMEDA**

Our Bạch Hổ...?

(*SINGULARITY walks in, holding MILKY WAY's undetached embrace. They wear an eyepatch, made from the same material as the spacetime rug. They ignite the Big Bang Taser.*)

(*The TIDALS cower and run away.*)

(*The GALAXIES stand, shocked.*)

[End of "Big Rip".]

22. IT'S ABOUT SPACETIME

(*SINGULARITY embraces CARTWHEEL and WHIRLPOOL. They approach ANDROMEDA. They are literally repulsed by ANDROMEDA's white hole. They respectfully bow.*)

SINGULARITY

IT'S ABOUT...
IT'S ABOUT...
IT'S ABOUT SPACETIME.

(*Heading to TRIANGULUM.*)

(*TRIANGULUM gives no mind. They are left heartbroken.*)

**TRIANGULUM**

S P T...

(*SINGULARITY pulls out the glass dome, hidden in their clothes. They take the snow globe's base from TRIANGULUM.*)

[*The snow globe emits a beacon.*]

(*SINGULARITY fixes the glass to the snow globe.*)

(*TRIANGULUM give up on JD's desertion. They suddenly hug SINGULARITY.*)

(*The Galaxy family embrace.*)

[*The home returns.*]

(*Once the GALAXIES clean up the Continuum Checkpoint, SINGULARITY leads the Galaxy family back to their Ellipse.*)

[*The home stows away.*]

[*End of "It's About Spacetime".*]



[The Fabric of Spacetime]

[A curtain stands in the way of the Edge.]

(JD and GRAVITY exhaustedly skip in.)

JD

At quadrillion parsecs, we hit a wall... A curtain of spacetime.

(Banging their head against the curtain.)

GRAVITY

We would have been here in a fraction of the time... If it were not for your insufferable siblings... But we're here. If we can suffer through these terrains in the cosmic rain, we should suffice and scale any barricade.

JD

A little of me died inside with that scope, at the hands of Whirlpool. All of me died on this side of this cosmic curtain at the end of the Fabric of Spacetime, at the heart of us.

GRAVITY

We need to adapt our hearts to the corners.

(JD paces back and forth.)

JD

What corners? Cutting edge... There's nothing to cut!

GRAVITY

We haven't cut corners to get to where we are. Why start now? Relax... Moving objects are difficult to image or imagine.

**GRAVITY (cont.)**

Staying put made you fall for the Edge in the first place. This will only rekindle your fall. You have nothing to fall back on...

(JD stays put.)

JD

Nothing...

GRAVITY

Nothing is real. I felt that way being a fixed star like you.

JD

How do we unfix this reality, while fixing our realities?

GRAVITY

No need to fix ourselves. We are perfect the way we are from our angle of arcseconds to the minuscule approximation errors. Sure, the errors are inevitable when everything is distant. But now's just like before the Big Bang, when only the Edge is near, and your family is nearby.

(Tugging at JD's leg.)

JD

How do you have such a point of viewpoints?

GRAVITY

My parents used this perspective to find Singularity by the Edge of our Universe eternities ago.

JD

Where do we start?

**GRAVITY**

We start with the stars.

23. PARALLAX

(GRAVITY assembles $d = \frac{1}{p}$.)

GRAVITY

RELAXATION TIME

GETS DISTANCE TO EQUAL ONE OVER OBSERVED ANGLE.

(JD seems doubtful.)

DIVIDED, YOU ARE TO APPARENT

(Making JD sit.)

CHANGE IN POSITION, SO SIT.

DO GROUND YOURSELF.

JUST PARALLAX.

JD

PERILOUS.

GRAVITY

PARALLAX. PARALLAX.

JD

PARANOID.

GRAVITY

PARALLAX. SEE THE STARS?

PARALLAX. SEE THE STARS FROM WHERE YOU ARE.



(GRAVITY discards the distance formula.)

GRAVITY (cont.)

PARASITIC MINDS

GOT "NOWHERE" TO BURDEN YOU UNDER AND ENTANGLED.

MISALIGNED, JUST LIKE TRIANGULUM'S TRIANGULATION, SO TRY...

(Sitting by JD. They tilt their body, away from JD.)

TO TILT YOUR HEAD.

FIND PARALLELS.

JD

PARADOX.

GRAVITY

PERMANENT PARADIGM.

(JD tilts their head onto GRAVITY's shoulder.)

JD

PARAGON...

GRAVITY

PLEASE RELAX. SEE THE STARS?

REMAIN LAX. SEE THE STARS FOR WHO THEY ARE.

RELAX.

JD

I'M RELAXED.

[The light slightly peeks through a corner of the cosmic horizon.]



(*GRAVITY instantly sits up straight. They wag their tail.*)

GRAVITY

YOU SEE?

[*The light dissipates.*]

(*GRAVITY feels disappointed.*)

JD

I SEE *NOTHING*.

(*Smiling.*)

JUST PARALLAX.

PARALLAX.

[*The light returns, growing brighter.*]

(*GRAVITY graciously returns to leaning their body.*)

JD

GRAVITY

PARALLAX. PARALLAX. PARALLAX.

PARALLAX. FEEL THE STARS.

PARALLAX. FEEL THE STARS FOR WHO THEY ARE.

[*The curtain rises.*]

[*End of "Parallax".*]

[The Edge of the Universe]

[The horizon is painted with unseen colors. The air is scented with unscented aroma. The theatre constellates with ellipses, whether the geometric shape or the three dots. Six ellipses stand out, perhaps by appearance or they are clustered together.]

24. TANGENT

(GRAVITY is spectral blind, so they cannot see what JD sees. They enjoy the scent. They are proud that JD is living the dream.)

JD

WE HAVE GONE OFF ON A... TANGENT.

(Looking around for ABELL.)

(ABELL is not in the audience.)

(JD looks on, heartbroken.)

GRAVITY

THIS TANGENT YOU HOWL FOR...
 I'M SPECTRAL BLIND.
 WHAT DO YOU SEE BEYOND THE STARS? WHO DO YOU KNOW?

[The music drowns out JD's answers, leaving the Edge of the Universe unanswered.]

(JD mouths and points all about. They soon point to the six ellipses. They fall silent.)



JD

WE HAVE GONE ON OFF A... TANGENT.
LET'S BE GROUNDED.
I AM TAKING THE EDGE ON US.

[End of "Tangent".]

GRAVITY

After all this time together... After the stars we felt, the gas we expelled, the Universe that we derailed... You're taking the wide-open space... Away?

JD

Singularity is my true family. Besides the eye, the Edge might be the only way for them to forgive. I am able to live with that. My heart needs to take in, and not expel, the past.

GRAVITY

Singular— What about Abell? You didn't speak of them here. You said your black-hole heart sees your future family out there.

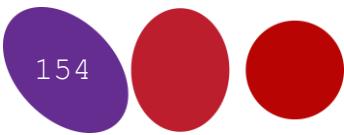
JD

Your pack was aware that Singularity's family is out there... That's why Singularity cares about the Edge being present by the Ellipse so much. Their scopes. Yet, I took that away from them...

Well, as I spoke with you, there were some misunderstandings. You persuaded me to strike Sing— Actually, I miscarried light. My supermassive heart played heartless tricks on me. Nothing is unclear... My future is not supposed to be as apparent... I'm past this. I need to be present for my siblings...

GRAVITY

Those nebulae that you call "siblings" put us in a cage.

**JD**

They provided a home after a near eternity of homelessness.

GRAVITY

Forgive me if I don't wanna be crowded in again. "Home" is closed space. I hate... You were the only one that saw me as a friend and not as a pet, and felt the eternal entrapment. On this trip, you evolved into a typical cold-hearted Galaxy.

JD

My heart is a broken house. My household is broken. Singularity's heart is broken. I broke it for you. So that you can not only manipulate me but spacetime around us. I need to manage the expanding guilt trip I have with my nomy/mama/papa. I felt— Fell for you. Gravity, you always get me down.

GRAVITY

Force...?

JD

I'm a tidal force's friend but truly Singularity's godsend.

GRAVITY

For a tidal dog, this friendly journey has only felt like a millennium. A Tidal wants their wide-open space! Besides, you as an adult aren't meant to be in a house for another eternity.

JD

You had quintillions of years of fun. Adult or not, my family can't alienate me. I am wrong to be here for another millennium. Relax. You're no pet. Singularity will be convinced that the cosmos built me and my siblings' morals. They will respect you and your fellow tidal forces' wishes in their black-hole heart.

**GRAVITY**

You're just like your Bạch Hổ. A tight and orderly jungle devours you. There's no convincing— I don't understand this tiger mindset. In this tundra that we call the cosmic dog park, my fellow tidal forces have never felt freer. For now, there is room for us to stretch the masses. There's a point in this tangent that you cannot go further. I have no stars left.

(JD pulls out a single ball. They toss it.)

JD

I have one.

(GRAVITY retrieves the ball.)

GRAVITY

You are lost.

JD

Where else could we go than back?

(GRAVITY sets the ball by JD. They sit.)

GRAVITY

What else could we do than go? We can stay. Fix. I will not go back to the singularity that was.

JD

Why didn't your parents stay?

GRAVITY

You've gone too far.

(JD picks up the ball. They toss it.)

**JD**

Far-fetched?

GRAVITY

I'm a tidal force. Stars are what I fetch. Hearts are not.

(JD pulls another ball out of thin air.)

JD

I'm a Galaxy. Stars are what I make. Not necessary with my heart. Legacy is everything. But there is nothing.

GRAVITY

Anything but your sweat and blood. With how spread out the Fabric of Spacetime is, there is not enough atoms to clump into a planet, let alone a star. Far-fetched will be a thing of the past. Don't let me stop you. Don't face the Big Freeze. I'll do with what is left of spacetime until you turn the Universe back into a singularity. I am as selfish as Singularity. SPT0615-JD... You are a Galaxy. You should be with your Galaxy family. Like them, I got to bounce. Gravity needs to be free!

(Leaving JD behind.)

(JD tosses the ball off the stage.)

JD

You make me! Nothing is nothing without you... Zilch.

[A lone star glows in the cosmic horizon.]

(JD picks up the ball on the stage. They pace alongside the edge of the stage. They drop the ball off the stage.)

Go off this tangent.



[Two stars cluster together in the cosmic horizon.]

JD (cont.)

We'll be together in... Crunch Time.

25. . . (Dot Dot Dot)

(*JD remains at the edge of the stage. They turn around, with their backs towards the audience. They walk in place. They traverse through the universal tundra.*)

[The entire Universe rolls by JD.]

(*Eventually, there is a gathering of the TIDALS. They are brawling amongst themselves to claim the role as the alpha of the pack.*)

TIDALS

(*Repeating.*)

DOT DOT DOT...

(*GRAVITY comes out victorious.*)

(*The TIDALS celebrate. They become aware of JD's presence.*)

[The home slowly rolls out from the horizon.]

TIDAL

That Galaxy is rolling back the Fabric of Spacetime.

**TIDAL**

That Galaxy is shutting down our cosmic dog park.

TIDALS

Let's spaghettiify them!

GRAVITY

If any tidal force lays a paw on this Galaxy, you will be buried six parsecs under.

TIDAL

That Galaxy is undoing everything we have worked for...

GRAVITY

That Galaxy is everything to me.

TIDALS

Our alpha has an alpha?

GRAVITY

This is between JD and GRAVITY.

(Directing the TIDALS out. They exit.)

(JD goes into hiding when the home is near.)

[End of "...".]



[*The Center of the Universe*]

(*The GALAXIES are disheveled and seem to have not eaten for quintillions of years.*)

(*WHIRLPOOL meditates on the rug.*)

(*ANDROMEDA wanders around outside the home.*)

(*CARTWHEEL and TRIANGULUM sit at the table, gazing into the snow globe.*)

CARTWHEEL

Milky Way, are you up for a game of Tardigrades and Elevators?!

WHIRLPOOL

Cartwheel, I may be down for that.

TRIANGULUM

Whirlpool, you know, a square like me doesn't comprehend your well-rounded interests.

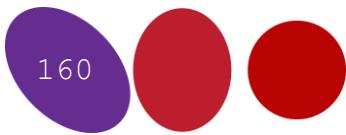
ANDROMEDA

Triangulum, you are a cube to us, which we'll start rolling once we get our toad out of their room...

(*MILKY WAY is in their offstage room.*)

MILKY WAY

Andromeda, I need to beat this level in Super Meridian Galaxy!

**GALAXIEs including JD, not MILKY WAY**

Teenagers...

(*ANDROMEDA pulls out their monocular. They scope out. They seem surprised.*)

(*WHIRLPOOL stops meditating.*)

(*TRIANGULUM holds the snow globe close.*)

(*CARTWHEEL stares out.*)

(*MILKY WAY comes out of their room.*)

MILKY WAY

What?

(*The GALAXIEs not JD gather at the table.*)

GALAXIEs not JD

Our Edge has returned...?

(*SINGULARITY arrives with miniature dishes. They exhaustedly bow.*)

SINGULARITY

Declinations, family. The Galaxy family. It is that time. No hugs, Milky Way? Your planetary friends would love for you to hug your nomy/mama/papa again.

MILKY WAY

Now's the end times, nomy/mother/father.

**SINGULARITY**

I'll never get used to each of your warp, waves, and wrinkles. Well, looks like someone is disappointed in how I am holding our Universe together. Rightfully so...

TRIANGULUM

Quit the sass, Milky Way.

CARTWHEEL

Declinations?

WHIRLPOOL

The Galaxy family?

SINGULARITY

You are all that I know. I can't meditate on it. I can only see you all for what you all are. The only thing we need is the Center of our Universe. This Dome Home. This Ellipse.

TRIANGULUM

Well, the Edge of our Universe is found—

ANDROMEDA

To be here at the table, where everything are asterisks.

SINGULARITY

You all are acting strange. Perhaps, it's the shortage of nuclear pasta here. Everyone, stop thinking about the Edge. I was wrong. That was a lot of risk, putting all the eggs in one singularity... The cosmos has spread itself out too thin. I am grateful for your sacrifice and the courage it took to step out of our home and onto the Fabric of Spacetime. It is apparent to me. Now back to being a formulaic parent. With my wrists and black-hole heart, I cooked you all up something special. Thin nuclear pasta and mini meteors.

(Passing out the dishes.)



(*JD reveals themself.*)

CARTWHEEL

Gal, this is the first...

(*SINGULARITY turns away from JD.*)

SINGULARITY

My first baby...

(*JD bows.*)

JD

Declinations, family. I need to shed light... On Singularity.

GALAXIES not JD

Indeed, declinations... You need to shed light on what you've done.

(*JD pulls out SINGULARITY's eye.*)

JD

I, SPT0615-JD... Believe that you miss this.

SINGULARITY

I have been better without my eye.

JD

You miss your parents.

SINGULARITY

I've stopped making light of my parents.

**JD**

That's the problem. You didn't let your parents make the light out of you.

WHIRLPOOL

Using antimetabole against the brightest celestial being in the Universe?

JD

I learnt from a tidal force who knew how to sound bright.

MILKY WAY

JD speaks dog.

JD

Gravity wants the wide-open space. Yet, I choice Singularity...

SINGULARITY

You chose wrong. I chose my children over that cursed Edge. I brought disorder to the family. But as for the tidal forces. When you kids are older, it'll be your duty to round them up.

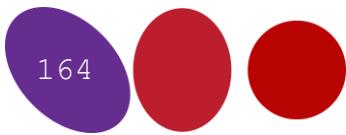
JD

Gravity told me that the tidal dogs found you by the Edge of the Universe. Freezing in the heat death of the Universe. Orphaned. To speak physics, you didn't say goodbye to your parents.

(SINGULARITY tearfully hums.)

SINGULARITY

One more verse out of your wormhole-

**JD**

You chose to run away from your home.

SINGULARITY

They chose to reject my heart.

JD

Must you reject your eye, too?

SINGULARITY

My black hole has only been accepting. For an eternity of peace, I've been accepting of Andromeda's repulsive white hole in fact. My heart is needed here until the last child repeats the Big-

JD

History. Our black holes are meant to be ejected out to the Universe, for all to feel its "inescapable" light. I *felt* that. But here's the Edge. Your parents are just beyond, somewhere.

SINGULARITY

My parents never accepted my heart. I accelerated yours. They didn't save space for my heart. I found space to save. My parents stayed with me. I am now my parents. And like any parent eventually, I'm rejecting you. The point is: you are who I was. Live your life, away from this Ellipse. It's your destiny. Your destination. I have a Center to take care of. You have plenty of light in you. As you've said, or your heart said, you've grown out of this Ellipse.

JD

Abell isn't there. You were right. It is a heartless and lightless universe. In an Ellipse unlike ours, I have nothing to take care of. I am unable to share the light of my heart.

SINGULARITY

You are unable to find familiarity and their celestial body. Why share your light to a body that leaves you cold?

JD

The same could be asked for you.

SINGULARITY

You certainly took care of me. You were resourceful at making our lives resourceless. Now, you're crawling back to the warm embrace of family so you can feel abled again. We're not able to do anything as you've stretched us thin. The Galaxies out there—

GALAXIES not JD

There really is not nothing— Galaxies over the Edge...?

SINGULARITY

There is nothing— No familiarity! You'll know when you are eternities older. Five more Big Bangs to look forward to...

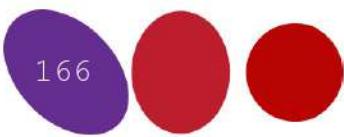
In that Universe, galactic couples are fixed to their Ellipses. Despite shedding light, Multiplicities shared only darkness with me. They are heartless to the hearted. They're never meant to hold light. It is why I am a single parent. Impaired.

You, however, are able to see something in a Multiplicity and nothing in me. You believed in pairs. As a parent, I now grant you the right to shed light where you need to. Face the Edge. You must cut away from this Center.

(The GALAXIES are astronomically shocked.)

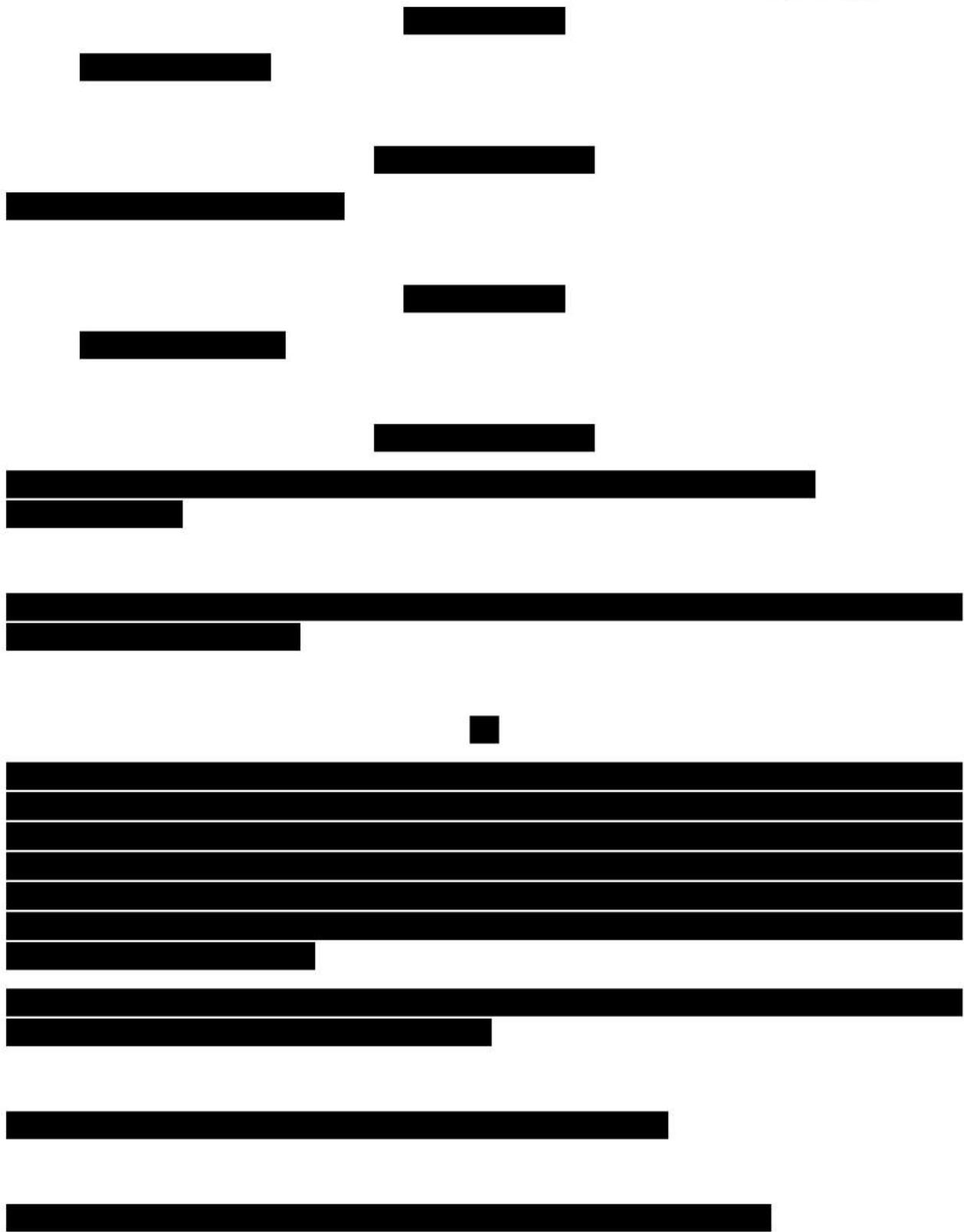
JD

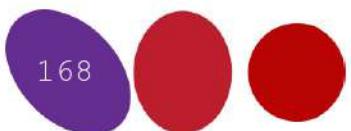
There comes a time when one must stop being apparent/a parent. Not now.

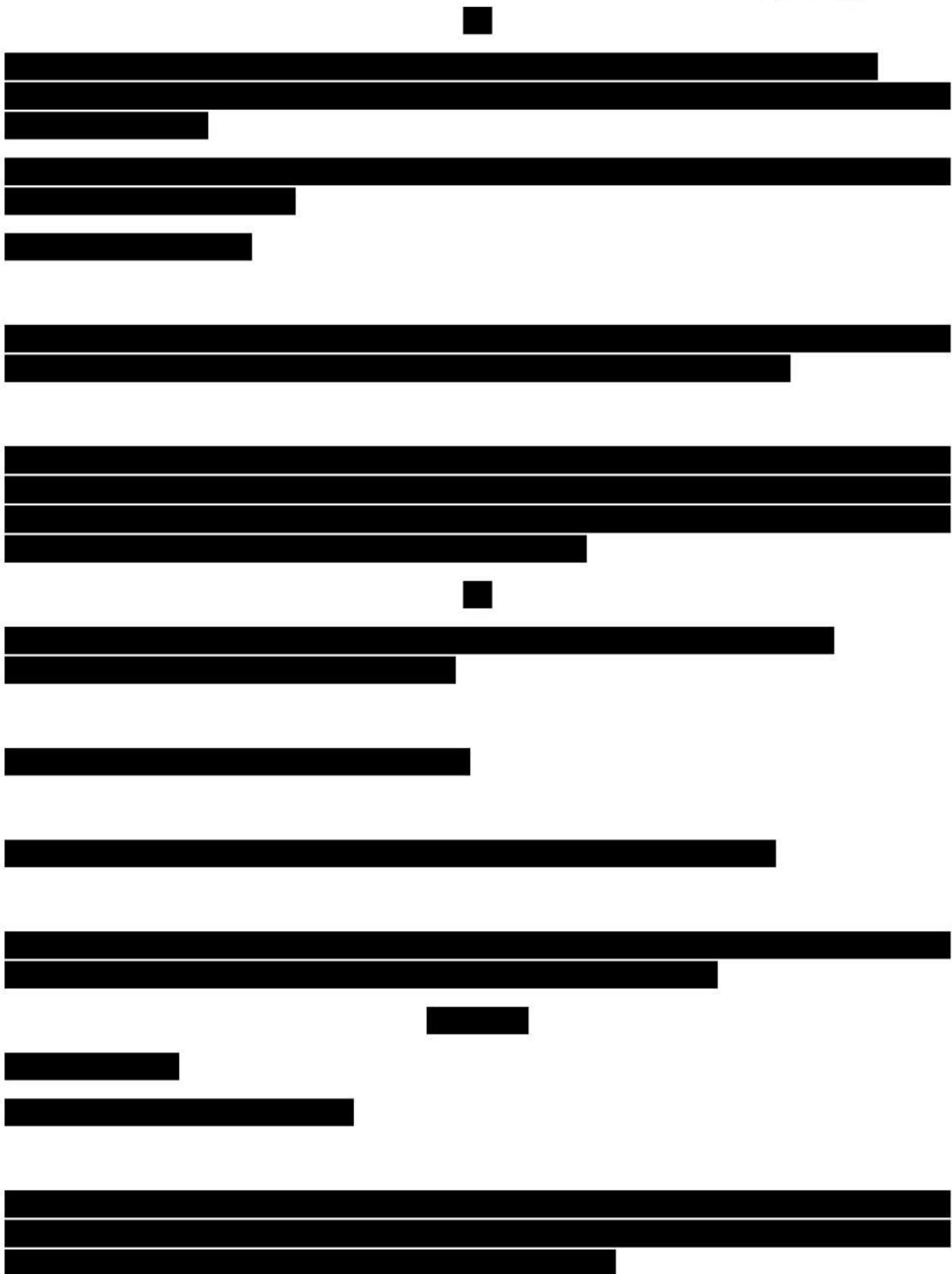


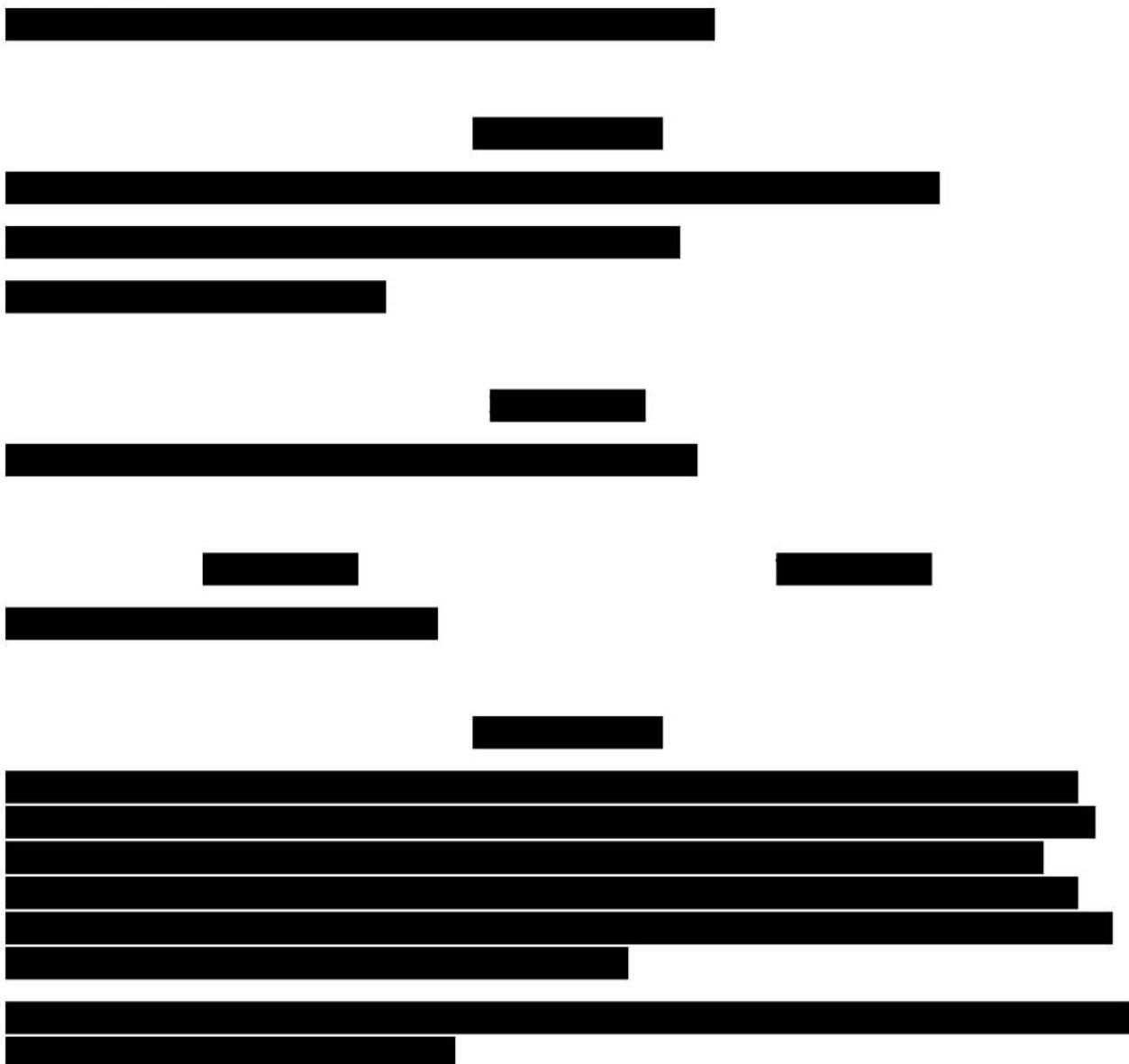
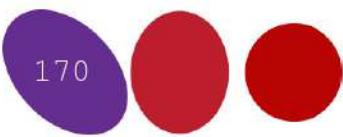
26. SHED LIGHT





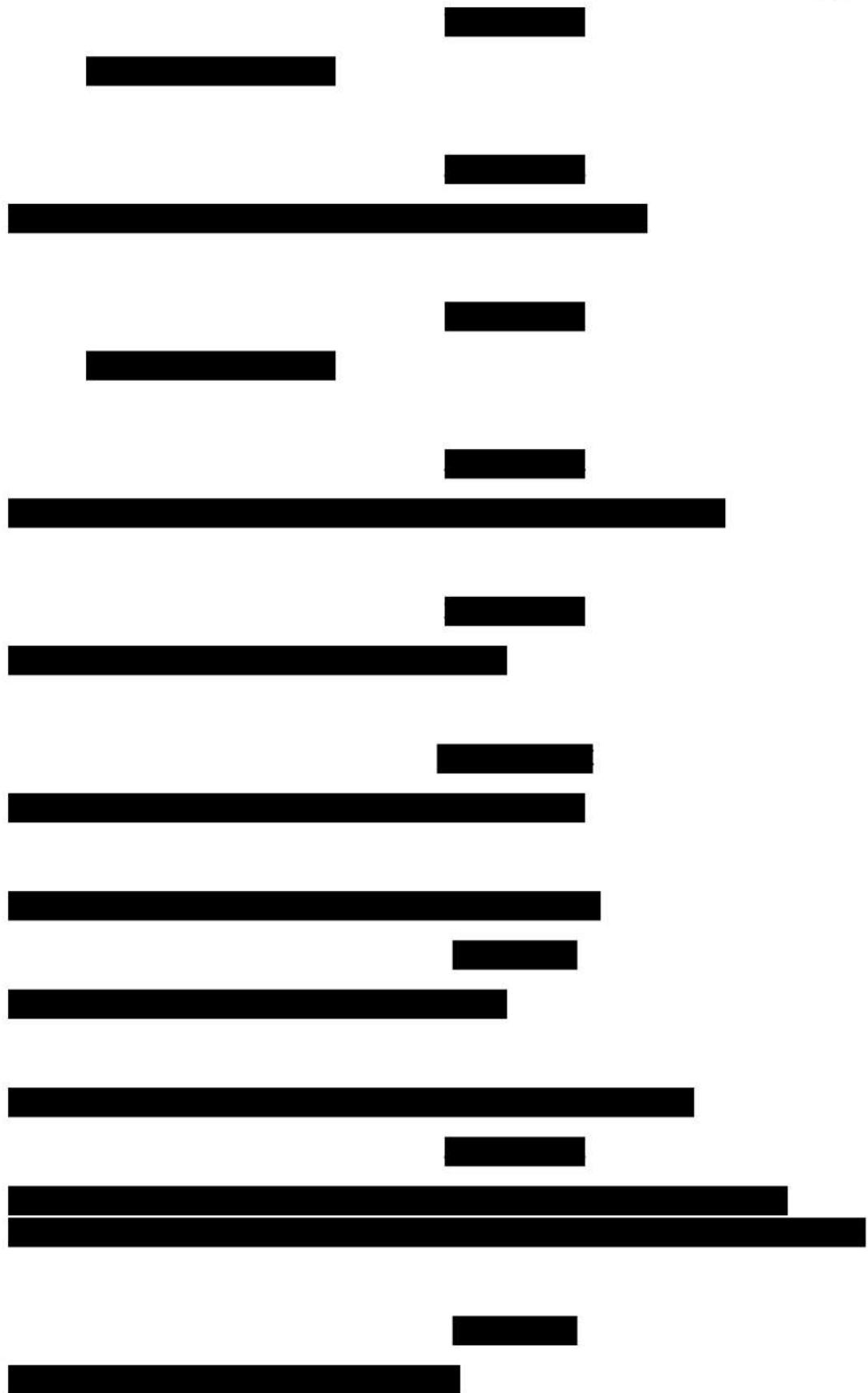


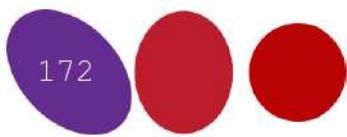




27. * (Asterisk)

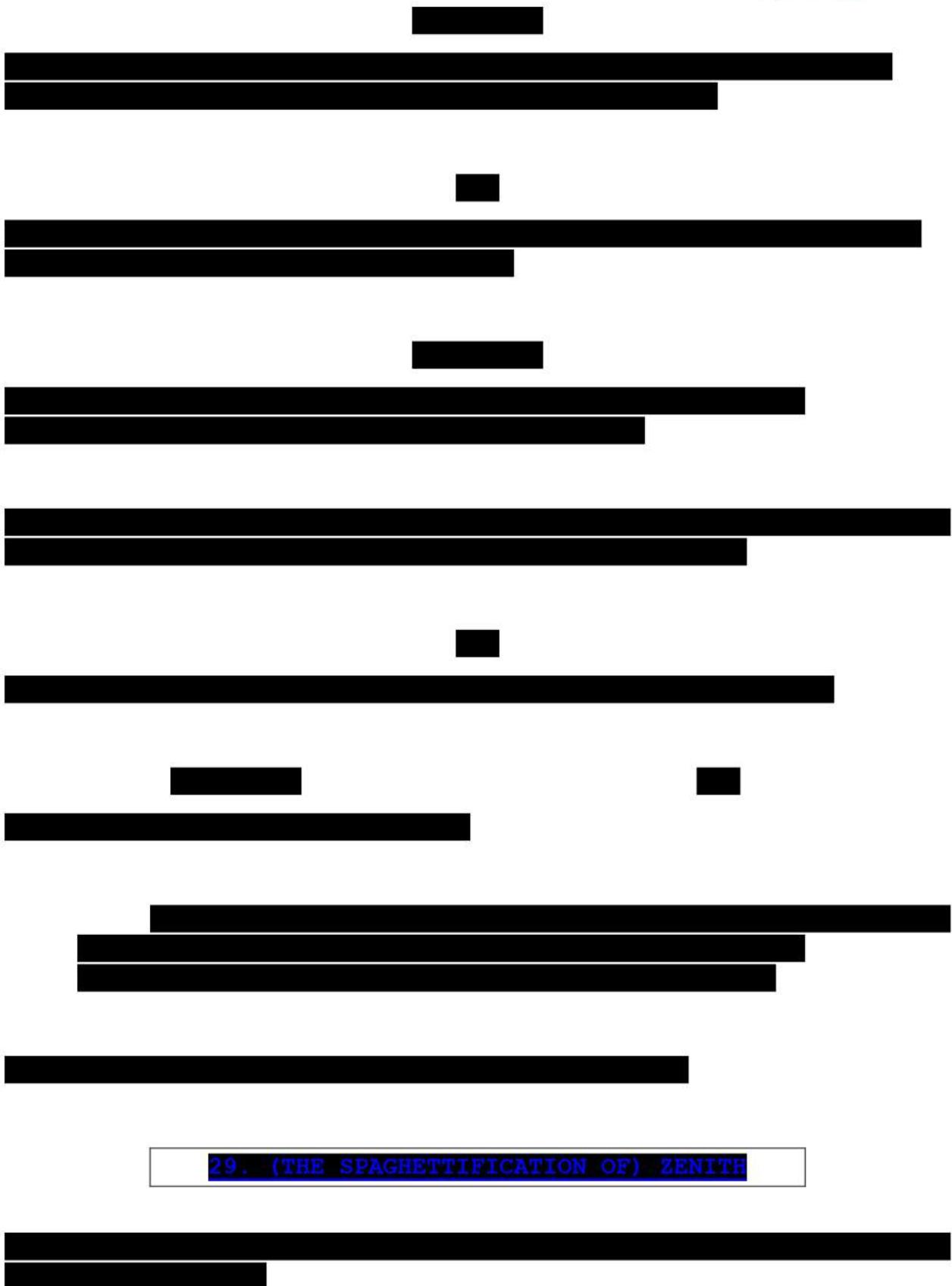




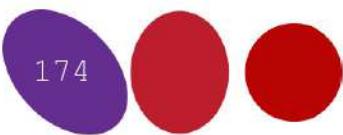


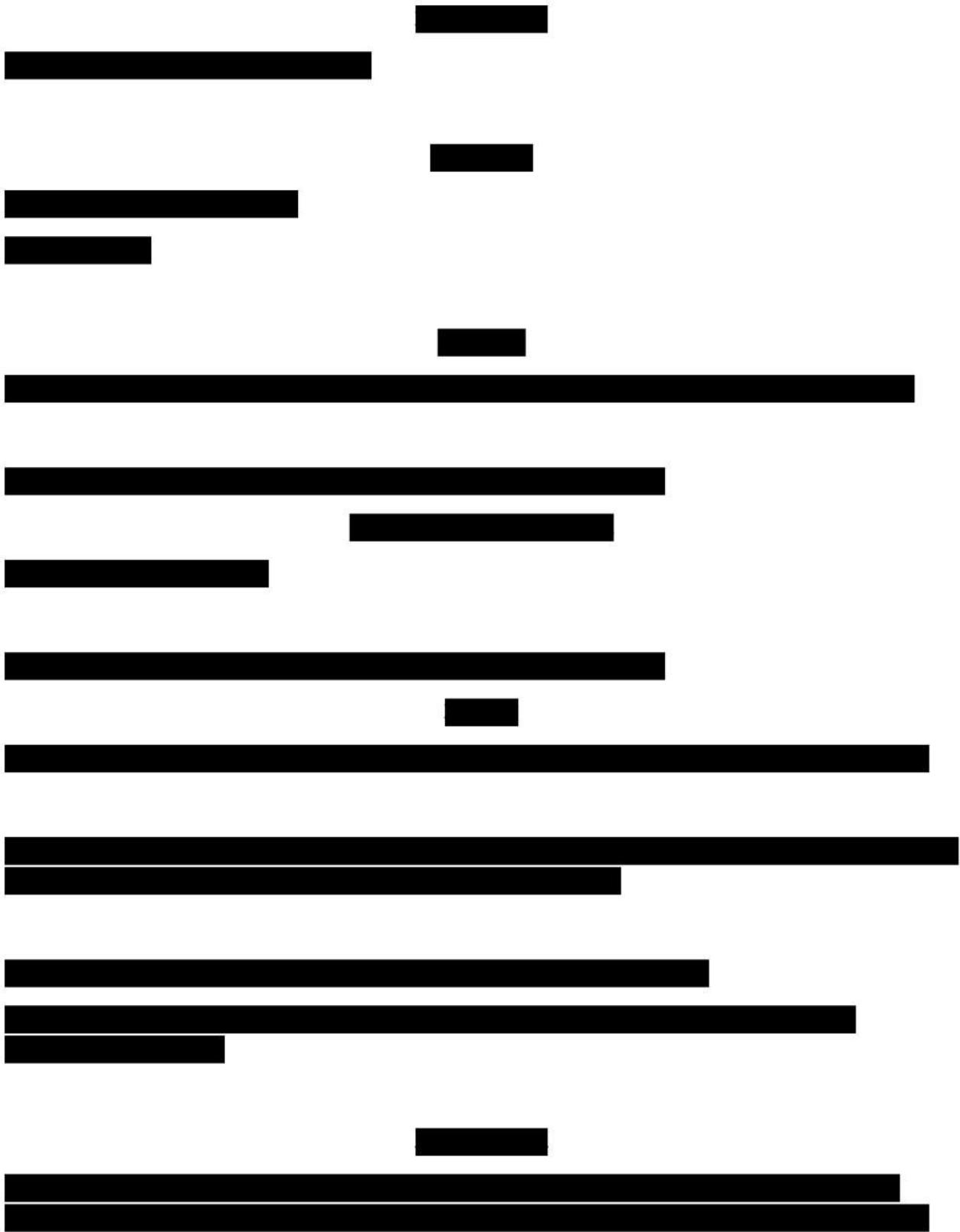
28. HEARTS IN THE RIGHT PLACE



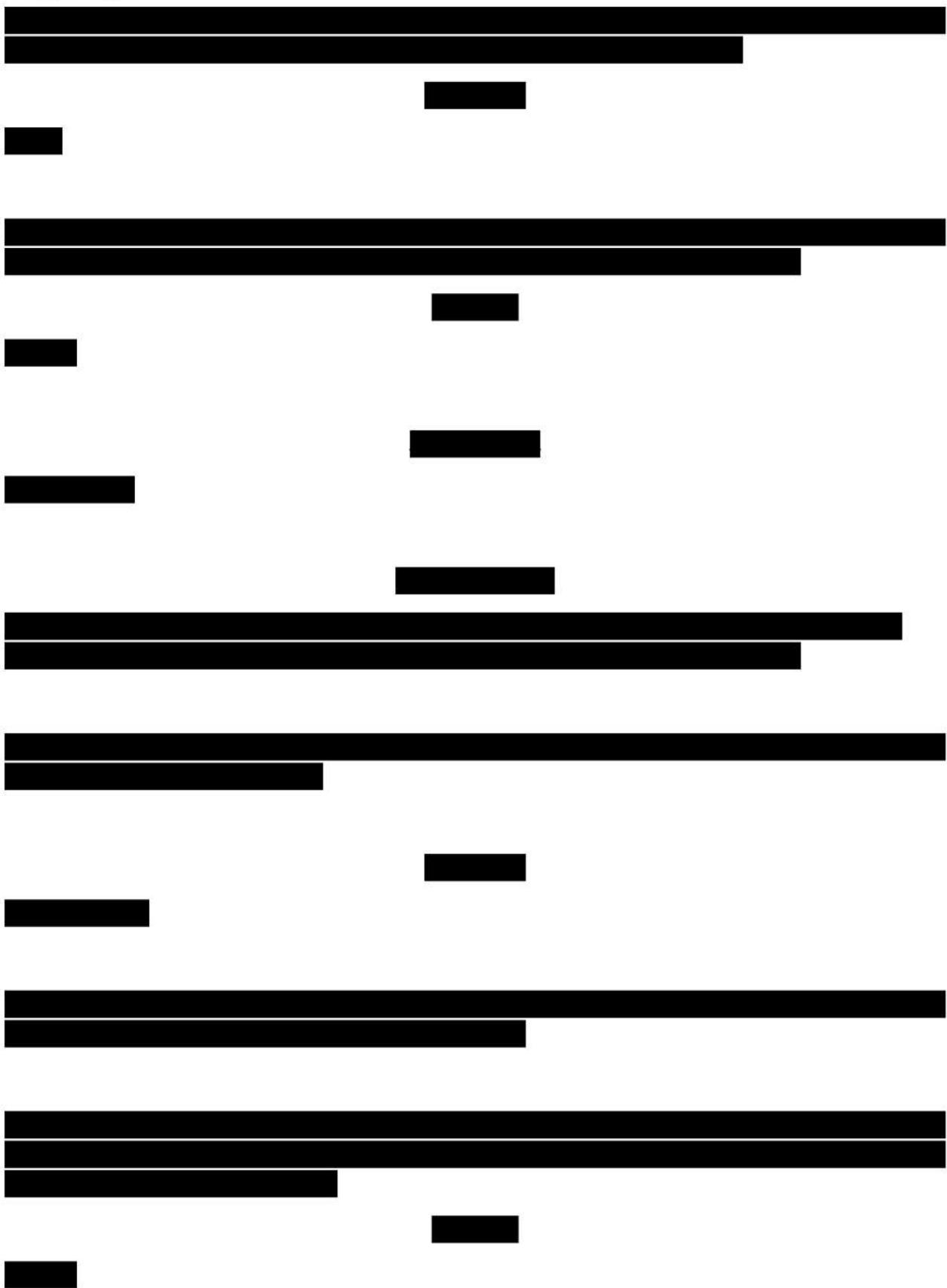
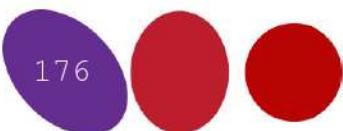


29. (THE SPAGHETTIFICATION OF) ZENITH

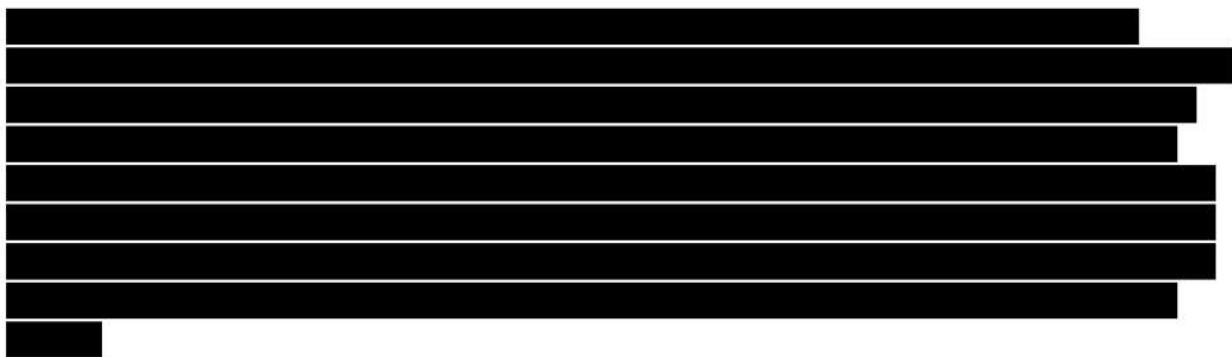
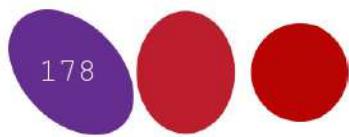


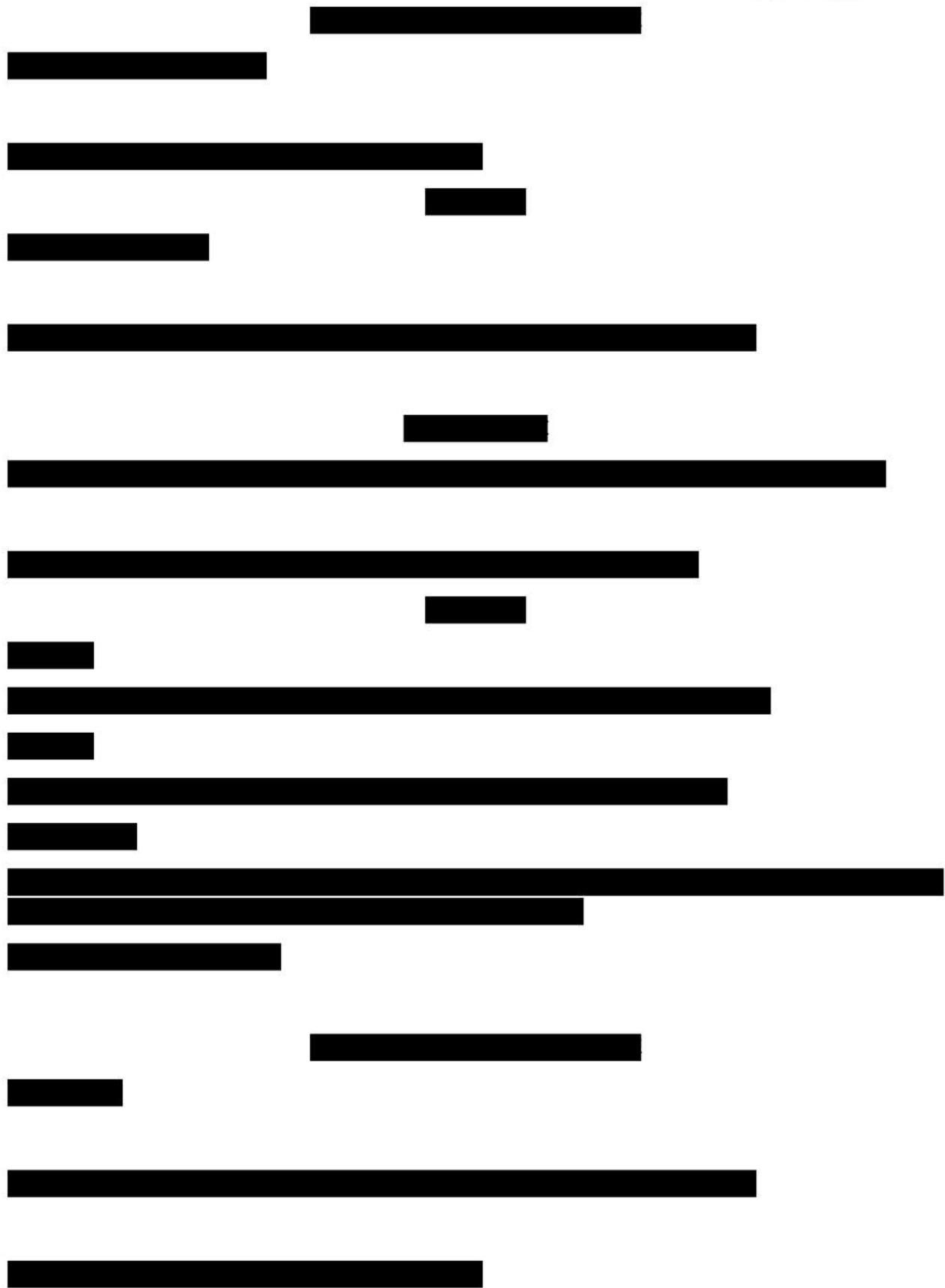


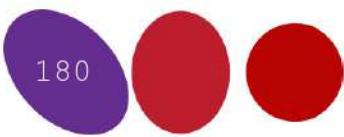
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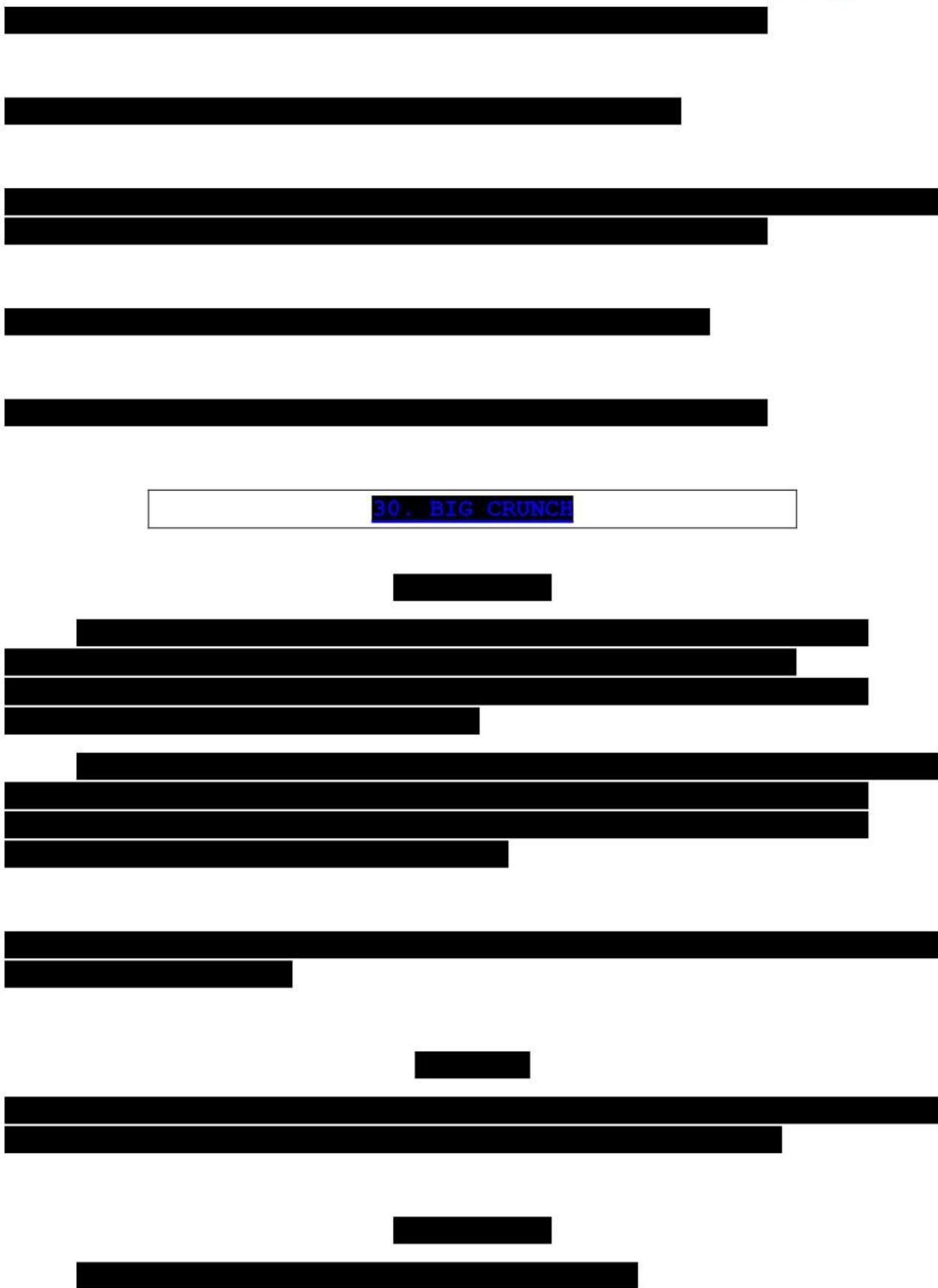


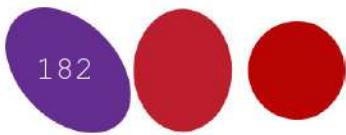






¹² The Big Crunch Theory is a theory of the end of our Universe, where its expansion eventually reverses and collapses into a singularity.

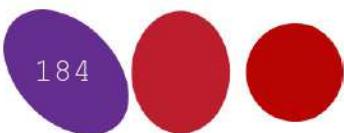




[REDACTED]

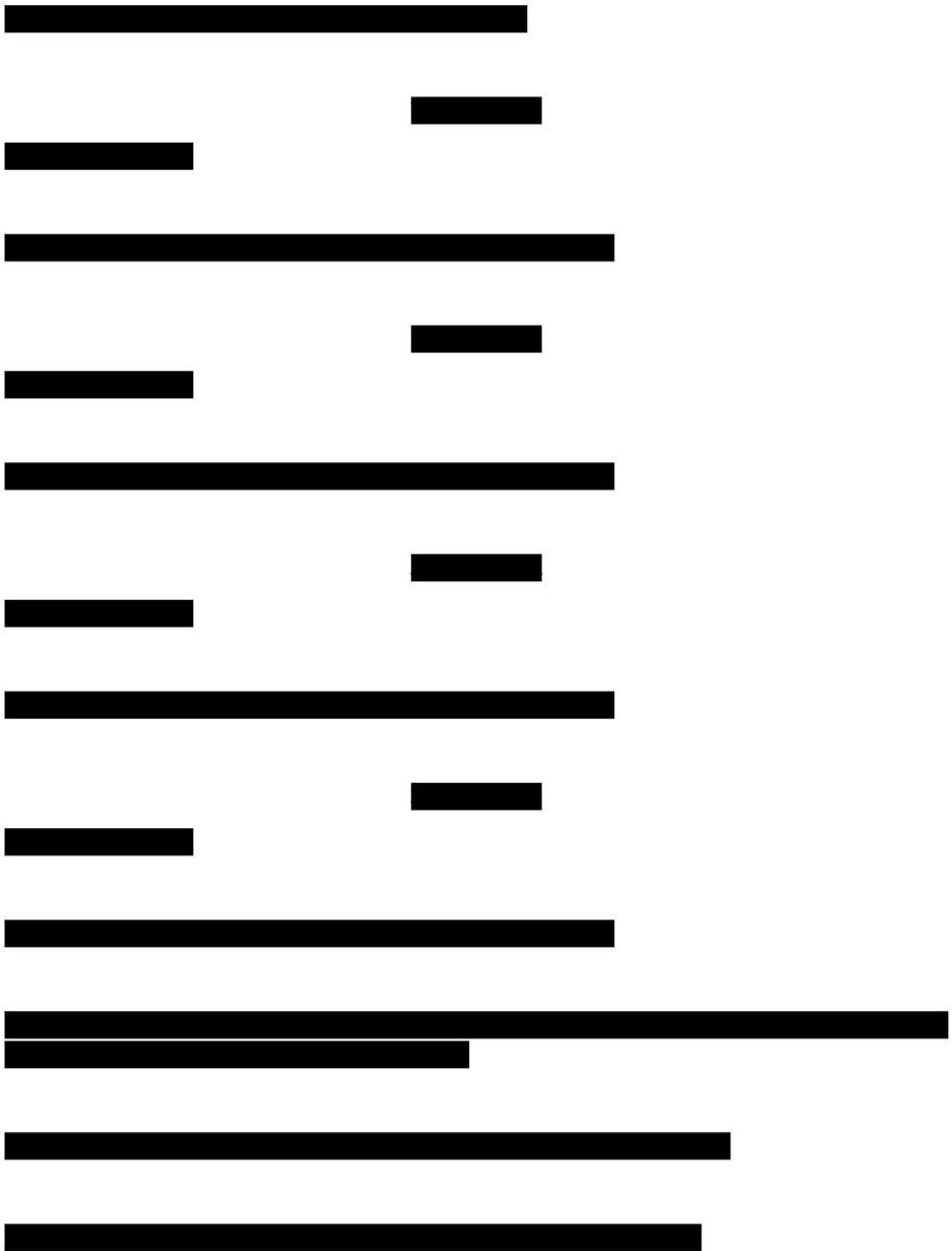


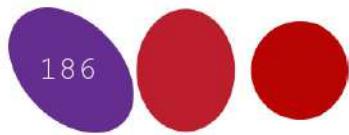
ACT III



31. BIG BOUNCE







[REDACTED]

[REDACTED]

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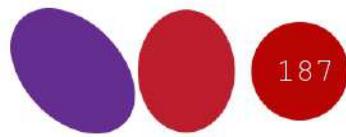
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A horizontal bar composed of three black rectangular segments. The first segment is the shortest, the second is of medium length, and the third is the longest, extending across most of the width of the bar.

[REDACTED]

[REDACTED]

[REDACTED]

ANSWER The answer is 1000. The first two digits of the product are 10.

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ANSWER The answer is 1000. The first two digits of the number are 10, so the answer is 1000.

ANSWER The answer is 1000.





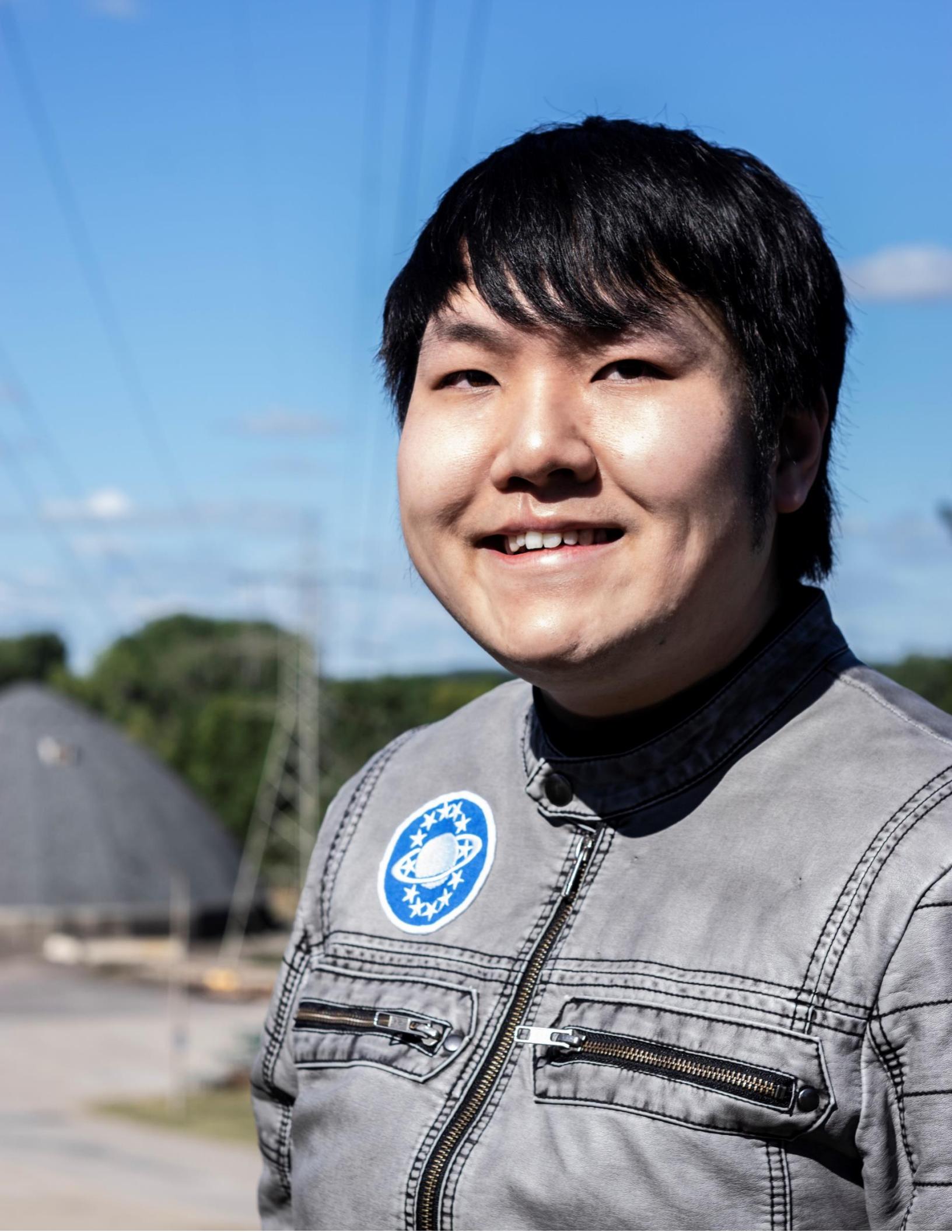
DAVID QUANG PHAM (he★him)

David Quang Pham is a science dramaturg and musical writer from Wyoming, Michigan. He is the recipient of the 2020-2021 New Play Development and Dramaturgy Apprenticeship for [Working Title Playwrights](#) in Atlanta. He practices professional new development dramaturgy under their Dramaturgy Master Intensive and the International Dramaturgy Lab with fellow members of LMDA. He is musically mentored by [Janelle Lawrence](#). He is a founding member of [CreateTheater](#)'s Expert Theater Company. A member of ΣΠΣ, ASCAP, and the Dramatists Guild, he attained an astrophysics degree with a minor in theatre at Michigan State University.

Since college, he has been working on a particle physics fable. [TOUR](#) revolves around Quark (the exchange student), Lepton (the doctoral advisor), Boson (the professor), and Atom (the aspiring scientist). This opera has these subatomic educators collide and compete with one another in the academic Accelerator. Under Working Title Playwrights, he is developing ELLIPSES. This astrophysics epic is about the Galaxy family and their quest to undo the Big Bang.

His astronomical and theatrical interests manifested as a child, with trips to operas and space camp. In middle and high school, he delved into music theory and played the modern sackbut. The nerdy persona remained, and the artistic talents dwelled into his collegiate years. As he was finishing his bachelor's thesis, his sister informed him that his high school calculus teacher had been annually sharing his musical. During his junior year of high school, he wrote MATHLAND for their winter project. He returned to musical writing on the side of thesis writing. Soon, he uncovered his niche: telling science through the human experience.

As an artistic scientist, he theorizes that science and art are not two sides of the same coin. Science and art make the coin. He spins this superposition.





<https://workingtitleplaywrights.com>



Sense-Ability Ensemble (openspottheatre.com)



The Cultural Workers Podcast
(anchor.fm/minka-wiltz)



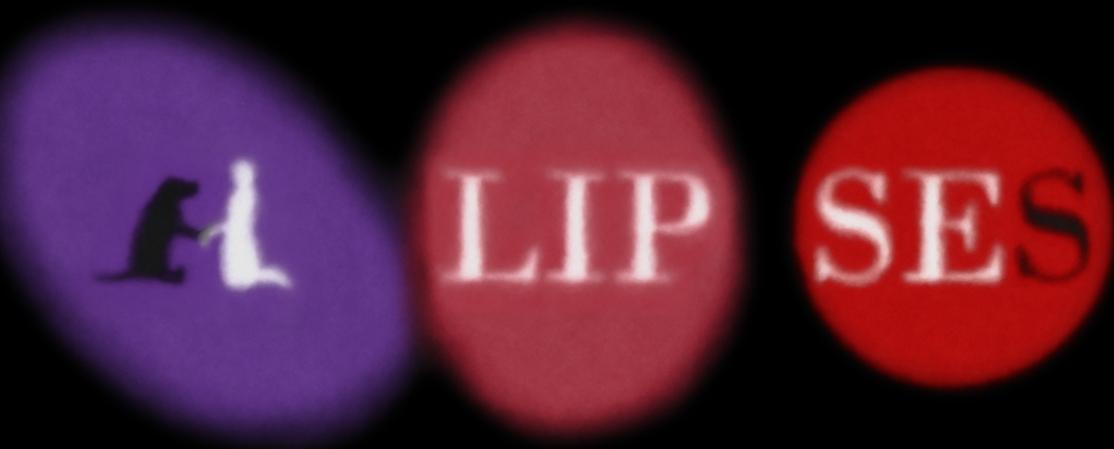
2941K



Inside My Box Podcast (anchor.fm/insidemybox)



Working Title Playwrights New Play Development Apprenticeship features
a concert and reading of a brand new musical about the Galaxy family



by DAVID QUANG PHAM | Dramaturged by JORDAN ALEXANDRIA EALEY
Managed by ALEXIS MCKAY | Directed by ALIYAH CURRY
Performed by the All-Galaxy Cast



MINKA WILTZ



VALLEA E. WOODBURY



DANIELA COBB



JASON-JAMAL LIGON



SKYE PASSMORE



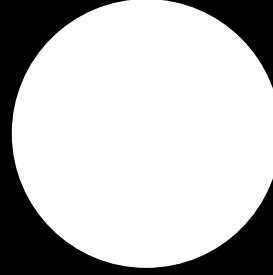
ABBY HOLLAND



DANIEL SAKAMOTO-WENGEL



EVAN PHILLIPS



KAIT RIVAS

THURSDAY, JULY 15TH, 2021 · 6:30 PM ET | READING: 7 PM ET
ELLIPSESPLAY.COM