



# ELLIPSES

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A Musical

by

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# WORKING TITLE PLAYWRIGHTS

THANK YOU

Name	Role
Andrea Ghez Ed Loh	Professors of Galaxies
<a href="#">Janelle Lawrence</a>	Operatic/Musical Mentor
<a href="#">Kristin Idaszak</a>	Science Playwriting Mentor
Lau'rie Roach Bryan Montemayor Imani Vaughn-Jones Isake Akanke Kate Jacoby	Originated Readers
Laurel Anderson Barb Carboy	Observers



## DEVELOPMENT

Date	Type	Site	Specifics
2017	Idea	Michigan State	AST 308 Galaxies and Cosmology by Ed Loh
2020 8-15	Writing	Working Title Playwrights	Addae Moon's Master Class, "Generating Story Idea"
2020 10-5	Reading (Preview)	Working Title Playwrights	Monday Night Critique Sessions

## SYNOPSIS

An astrophysics epic, ELLIPSES centers on a family of Galaxies trying to reverse the Big Bang, after a member sets it off. This musical follows a teenager and their dog running away from home. SPT0615-JD and Gravity, their tidal force, journey away from the center of the universe. The story explores Hubble's Law and the Big Crunch Theory. In astrophysics, Galaxies follow this law: to distance from the center. It is not unlike a human being. We want to get out and explore. The analogy is expressed through these personifications and clothed like astronomers. The set has a dome home to represent the center, the stage is space, and the fourth wall is the edge. The universe is told through the human experience.

The teenage Galaxies begin their routine by staring out with their monoculars ("[Bounce](#)"). They are called to supper by their parent. Singularity nurtures them and their tidal dogs, but a child is missing at the table ("[Crunch](#)"). JD is still looking out. They just want to go to the edge of the universe ("[Cutting Edge](#)"). However, Singularity speaks of its perils and sends them to bed ("[Ground](#)"). Letting JD out of bed, Triangulum outlines their family values ("[Anomaly is Everything](#)"). Eager for a voyage anyways, JD finds Singularity's BB Taser stashed under the family's rug. JD deems the fabric of spacetime to be just as sturdy ("[Sweep under the Rug](#)"). Later, Singularity assesses each of their child's black-hole hearts ("[Hinge](#)"). With this being the final straw, JD shoots their parent in the face with the BB Taser. In the chaos, Gravity discreetly picks up Singularity's dislodged eye. Then, JD flees with Gravity to the edge, but the edge keeps distancing from them. It is like a rolled-up rug that JD keeps rolling away ("[Big Bang](#)").

Heartbroken, Singularity kicks out their children ("[Depth](#)") and has them spend eternity trying to roll back the edge. The siblings blame one another for kickstarting the universe ("[Apartment](#)"). In their isolation, Milky Way speaks to their Solar System ("[Warp, Waves, and Wrinkles](#)"). Elsewhere, JD and Gravity are on an adventure ("[Verse](#)"). Others try to quit and go home ("[Time is Relative](#)"). But they face Singularity's attack dogs, who ensure that no siblings merge ("[Working Tidal](#)"). Triangulum, Andromeda, and Milky Way band together but keep their distance ("[Bundle](#)"). Soon, the Solar System develops into



a swelling. Despite Triangulum's objections, Andromeda comes to the aid of Milky Way. Before the dogs could pounce, Milky Way emits flares of light that scare them off ("[Fabric](#)").

A trillion years pass, and JD and Gravity are still traversing space. They find time to play fetch, which goes on for far too long and Gravity catches on JD's fugue. Through a stellar speech, Gravity explains that the point of return is far-fetched ("[Far-Fetched](#)").

From the center, Singularity observes their children through a telescope ("[Wrong Space](#)"). The edge is on the cosmic horizon.

In the following act, most siblings have bundled together ("[Bounce Back](#)"). They reach JD and Gravity ("[Accretion](#)"), and take them in. As they rest together, Gravity reveals that they have been holding Singularity's eye. JD peeks through it to uncover the backstory of Singularity, who ran away from their own universe ("[In-Depth](#)"). JD decides to continue as their parent had ("[Eccentricity](#)"). Upset by their choice, Triangulum takes JD's monocular and traps JD. Gravity distracts them by signaling the dogs to their location. In the frenzy, JD and Gravity race to the edge ("[Cutting Off](#)"). Soon, Singularity calls off the dogs ("[Fabricate](#)"). The siblings make their way home ("[Spacetime](#)").

An eternity passes, and JD feels lost more than ever without their monocular. Gravity sites that the scope is within their black-hole heart ("[Scope](#)"). In that spirit, the edge comes to them. With the enduring love from their siblings, JD decides to head back, taking the edge with them ("[Edge](#)"). When they return, JD tries to give back Singularity's eye. They do not forgive JD. After giving Gravity one last hug, JD jumps off the edge ("[Dropout](#)"). In these millennia of grief, the siblings hold each other close ("[Center](#)"). Singularity chooses to take in their eye, restoring their depth perception. Singularity looks beyond. JD is amongst an audience. To the eye of the beholder, it is an ellipse full of Galaxies. JD has found their center ("[Hearts are in the Right Place](#)").

Gravity returns with a wolfpack in JD's honor. They surround the family. Singularity and their Galaxies sit at their table in their center, as the tidal forces consume them ("[Big Crunch](#)"). In the darkness, a bang is seen and heard again ("[Big Bounce](#)").

Dispersal leads to roots. Family is everything.



# CHARACTER BREAKDOWN

○ Androgyny and Galaxy ○

Character	Vocal Tone & Range	Identity
<u>SPT0615-JD</u> A distant galactic sibling. JD wants to know what is beyond the edge of the universe.	Any	Teenager
<u>SINGULARITY</u> The relativistically impossible guardian. Singularity wants to keep their universe intact.	Any	Adult
<u>GRAVITY</u> A tidal dog. Gravity wants to ground JD on their voyage.	Any	Any
<u>TRIANGULUM</u> A jingoistic galactic sibling. Triangulum wants to be the role model.	Any	Teenager
<u>ANDROMEDA</u> A dreamy galactic sibling. Andromeda wants to find resplendence in the chaos.	Any	Teenager
<u>MILKY WAY</u> An aimless galactic sibling. Milky Way wants to make themself useful.	Any	Teenager
<u>WHIRLPOOL</u> An anaerobic galactic sibling. Whirlpool wants to be present for Cartwheel.	Any	Teenager
<u>CARTWHEEL</u> An aerobic galactic sibling. Cartwheel wants to be present for Whirlpool.	Any	Teenager
<b>Ensembles</b>		
TIDALS	SOLAR SYSTEM	MULTIVERSITIES



## **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 language of tidal forces.

## **SOLAR SYSTEM**

Solar System are celestial bodies that speak to Milky Way when Milky Way wanders the universe alone. They are the voices inside Milky Way's head. They do not make an appearance. They speak for several billion years (several-minutes staging time) before the Sun becomes a red giant (swelling) in the first act.

## **MULTIVERSITIES**

Multiversities are Singularity's parental figures from their native universe. They are personified as universal law enforcers. In "In-Depth," they cry out for Singularity, after Singularity runs away from home (the center of their own universe). They do not make an appearance but may be represented as silhouettes when Singularity is in front of the stage. Each Multiversity are alphabetized to mean that at least two performers portray them, as long as they switch back and forth in the lines.

# MUSICAL NUMBERS

♪ #	Page	Title	Character (s)	◦Present but unvocal
1.	13	<a href="#">Bounce</a>	JD TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL	
2.	16	<a href="#">Crunch</a>	SINGULARITY TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL JD GRAVITY tidals	
3.	21	<a href="#">Cutting Edge</a>	JD GRAVITY TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL SINGULARITY	
4.	—	<a href="#">Ground</a>	SINGULARITY JD TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL	
5.	—	<a href="#">Anomaly is Everything</a>	TRIANGULUM JD WHIRLPOOL CARTWHEEL	
6.	—	<a href="#">Sweep Under the Rug</a>	JD GRAVITY tidals	
7.	—	<a href="#">Hinge</a>	SINGULARITY JD TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL GRAVITY tidals	
8.	—	<a href="#">Big Bang</a>	JD SINGULARITY GRAVITY TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL tidals	
9.	—	<a href="#">Depth</a>	SINGULARITY TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL tidals	
10.	—	<a href="#">Apartment</a>	TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL	
11.	—	<a href="#">Verse</a>	JD GRAVITY	
12.	—	<a href="#">Warp, Waves, and Wrinkles</a>	MILKY WAY solar system	
13.	—	<a href="#">Time is Relative</a>	WHIRLPOOL CARTWHEEL	
14.	—	<a href="#">Working Tidal</a>	SINGULARITY WHIRLPOOL CARTWHEEL tidals	
15.	—	<a href="#">Bundle</a>	TRIANGULUM ANDROMEDA MILKY WAY	
16.	—	<a href="#">Far-Fetched</a>	GRAVITY JD	
17.	—	<a href="#">Fabric</a>	TRIANGULUM ANDROMEDA MILKY WAY tidals solar system	
18.	—	<a href="#">Wrong Space</a>	SINGULARITY	
19.	—	<a href="#">Bounce Back</a>	TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL	
20.	—	<a href="#">Accretion</a>	JD GRAVITY TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL	
21.	—	<a href="#">In-Depth</a>	SINGULARITY multiversities tidals GRAVITY	
22.	—	<a href="#">Eccentricity</a>	JD GRAVITY TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL	





♪ #	Page	Title	Character (s)	◦Present but unvocal
23.	—	<a href="#">Cutting Off</a>	JD   GRAVITY   TRIANGULUM   ANDROMEDA   MILKY WAY WHIRLPOOL   CARTWHEEL   <i>tidals</i>	
24.	—	<a href="#">Fabricate</a>	SINGULARITY	
25.	—	<a href="#">Scope (Cut It Close)</a>	GRAVITY   JD	
26.	—	<a href="#">Edge</a>	JD   GRAVITY	
27.	—	<a href="#">Spacetime</a>	SINGULARITY   TRIANGULUM   ANDROMEDA   MILKY WAY WHIRLPOOL   CARTWHEEL	
28.	—	<a href="#">Dropout</a>	JD   SINGULARITY   GRAVITY   TRIANGULUM ANDROMEDA   MILKY WAY   WHIRLPOOL   CARTWHEEL	
29.	—	<a href="#">Center</a>	TRIANGULUM   ANDROMEDA   MILKY WAY   WHIRLPOOL CARTWHEEL   SINGULARITY	
30.	—	<a href="#">Hearts Are in the Right Place</a>	JD   SINGULARITY   TRIANGULUM   ANDROMEDA MILKY WAY   WHIRLPOOL   CARTWHEEL <i>multiversities</i>	
31.	—	<a href="#">Big Crunch</a>	SINGULARITY   TRIANGULUM   ANDROMEDA   MILKY WAY WHIRLPOOL   CARTWHEEL   <i>tidals</i>	
32.	—	<a href="#">Big Bounce</a>	COMPANY	

## MUSICAL NOTES

JD | “The edge of the universe” is sung: The (D3-5) edge (B2-4)  
of (A2-4) the (F#2-4) u (G2-4) ni (F#2-4) verse (F#2-4 → D2-4)

SINGULARITY | The hums are the longing melody within “In-Depth”:  
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)

CARTWHEEL | Associative Instruments: Jingle Ring Tambourine,  
Jingle Bell

# SCENES

Act	Page	Location	SET props
Ii	13	The Center of the Universe	DOME HOME VANTABLACK RUG TABLE SEATS balls BB Taser dishes knapsack monoculars snow globe whoopie cushion
Iii	—	The Fabric of Spacetime	
Iiii	—	The Center of the Universe	
Iiv	—	The Fabric of Spacetime	
Iv	—	The Center of the Universe	DOME HOME VANTABLACK RUG TABLE SEATS telescope
IIi	—	The Fabric of Spacetime	
IIii	—	Singularity's Past Universe	BB Taser vantablack fabric
IIiii	—	The Center of the Universe	DOME HOME TABLE SEATS
IIiv	—	The Fabric of Spacetime	
IIv	—	The Edge of the Universe	
IIvi	—	The Center of the Universe	
III	—	The Center of the Universe	DOME HOME TABLE SEATS snow globe

## SET DESIGNS





## 21. IN-DEPTH

*[SINGULARITY's Backstory and Past Universe]*

*[Wonders fill the theatre.]*

*(GRAVITY remains absent. They narrate.)*

### **GRAVITY**

An eternity ago in a universe unlike any other that we could ever fathom, these supernatural beings, called Multiversities, gave birth to a very special Galaxy. They named their baby, Singularity. And like any other Galaxy, this one bloomed. However, Singularity was unlike their guardians. This Galaxy had a supermassive heart. 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, Multiversities sat Singularity down and let them know what is in their heart(s). And with that heartless truth, Singularity left behind their family, ran away from their center, and fell off the edge of their universe.

*(SINGULARITY remains absent. They are heard holding on to the edge of their native universe for dear life.)*

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

~~(A reminder that this is during a period of time before their six galactic children were born. So, SINGULARITY has their eyes intact. SINGULARITY appears youthful and resplendent as a Galaxy. They hold a torn chunk of vantablack fabric, shielding the BB Taser. In front of the stage, they may scream as they tumble in. They get up and limp alongside the front of the stage. They find a spot to collapse against. They feel lost and frightened 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**

I DON'T HAVE A HOME...?

*(MULTIVERSITIES never physically appear. They may be casted as shadows or projections of celestial bodies searching on stage. They shout SINGULARITY's name in hopes of getting SINGULARITY's attention and finding SINGULARITY, then they follow up by having a grief-stricken discussion with accompanying MULTIVERSITIES.)*

### **MULTIVERSITY 1/A**

Singularity! We love you. We gravitate to you. We need you. We balance time for you. Our precious Galaxy, where are you?! Come home! Return to the center of the universe, at once!

*(Addressing another MULTIVERSITY.)*

File a report. Our child ran away from home. Our baby is missing!



## MULTIVERSITY 2/B

Singularity!

*(Addressing MULTIVERSITY 1/A.)*

We're a part of the force... We raised them without forcing doubt on them. *But you just had to go and tell them about their supermassive disorder.* Now, we know supermassive disorder. I authorized you to keep their center a secret!

## SINGULARITY

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

## MULTIVERSITY 1/T

Singularity!

*(Addressing MULTIVERSITY 2/B.)*

What? The theory that they have a black hole for a heart? Do you not see the problem of stars orbiting that chasm of theirs? What would cells want to do circulating a heart? Why can't their stars be stationary like ours? They have been relativistically impossible to handle. I would regret as a mother/father if I spaghettified the truth.

## SINGULARITY

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

## MULTIVERSITY 2/A

Singularity!

*(Addressing MULTIVERSITY 1/T.)*

You ripped a wormhole in them. You broke their heart. 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...

**MULTIVERSITY 1/E**

Singularity!

*(Addressing MULTIVERSITY 2/Δ.)*

Our home is trashed everywhere they go—

*(Retracting.)*

Forget it. My ego is atomic, but my love for our little nebula is galactic. Out there, they themselves will be even more mutated and deformed. Agony. Ionized gas. They had to empirically know what their heart is capable of. Some millennia.

**MULTIVERSITY 2/Z**

Singularity!

*(Addressing MULTIVERSITY 1/E.)*

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!

*[MULTIVERSITIES' shadows may die out.]*

## MULTIVERSITY 1/H

Singularity!

*(Addressing MULTIVERSITY 2/Z.)*

They sucked the light out of us, into their little event horizon!

*(Fighting despondence.)*

And that heart is where the lights are trapped inside... And time carries on with them, too. And, their heart sucked energy out of this space. They should have had enough energy to get themselves out of any mess...?

*(SINGULARITY tries to reach for the stage.)*

## SINGULARITY

I DON'T HAVE THE... ENERGY TO...

## MULTIVERSITY 2/©

Singularity!

*(Directing another MULTIVERSITY.)*

Declination!

## SINGULARITY

I DON'T HAVE THE... ENERGY TO...

## MULTIVERSITY 1/I

Singularity!

*(Directing another MULTIVERSITY.)*

We looked up and down. Right ascension?!

## SINGULARITY

I DON'T HAVE THE... ENERGY TO...



**MULTIVERSITY 2/K**

Singularity!

*(Directing another MULTIVERSITY.)*

We looked left and right. Fourth dimension?!

**SINGULARITY**

I DON'T HAVE A REACH...

**MULTIVERSITY 1/A**

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

*(Silence. MULTIVERSITIES realize that their child/cluster of stars has forever vanished.)*

**MULTIVERSITY 2/M**

Singularity fell off the edge of the universe!

*(MULTIVERSITIES weep for all eternity.)*

*(SINGULARITY ponders for an eternity. They take it all in.)*

**SINGULARITY**

I'M OUT OF MY DEPTH.

I'M OUT OF MY DEPTH.

I'VE GONE OFF THE DEEP END. IT'S HERE...

*[The light focuses more on SINGULARITY, as though it asks SINGULARITY to go to it.]*

*(SINGULARITY literally soaks in the light.)*



## **SINGULARITY**

I'M INTO DEEP.

*(MULTIVERSITIES say SINGULARITY's name under their breaths. Then, they follow up by rationalizing with accompanying MULTIVERSITIES.)*

### **MULTIVERSITY 1/N**

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...?

### **MULTIVERSITY 2/E**

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.

### **MULTIVERSITY 1/O**

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.

### **MULTIVERSITY 2/Π**

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

*(SINGULARITY breaks down.)*

### **MULTIVERSITY 1/P**

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

*(The TIDALs' cast shadows in the distance.)*

*(SINGULARITY cannot clearly see what is going on.)*

### **SINGULARITY**

I DON'T HAVE THIS... DEPTH PERCEPTION...  
I AM NOT IN-DEPTH...!

### **MULTIVERSITY 2/Σ**

Singularity... Just a crunch... *[Melody of "[Crunch](#)"]*

*(On stage, the TIDALs approach SINGULARITY.)*

### **SINGULARITY**

IN-DEPTH!  
I'M INTO DEEP.  
I'M DEAD!

### **MULTIVERSITY 1/T**

*(Saying it like Frozone and his Super Suit.)*

Multiversity... Where did we put the electricity...? Where is the BBT? The Big Bang Taser?!

*(SINGULARITY pulls out the BB Taser.)*

### **SINGULARITY**

In my native universe, this brings charge. And it's shocking...

*(Turning on the BB Taser. They point the BB Taser towards the TIDALs.)*

What kind of forces are you exerting—?

### **TIDAL(s)**

Force!



*(SINGULARITY sways a bit.)*

**SINGULARITY**

Like to echo, huh?

**TIDALs**

Force force force...!

*(SINGULARITY feels the tidal force.)*

**SINGULARITY**

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

**TIDALs**

Fall!

*(SINGULARITY falls over themself.)*

**SINGULARITY**

What are you howling about?!

**MULTIVERSITY 2/Y**

Multiversity. For safekeeping, our baby will take care of themself... Uh, did we ever teach them how to properly conduct the Big Bang Taser?

*(SINGULARITY accidentally electrocutes themself with the BB Taser. They shock themself into a stupor.)*

**TIDALs**

*(Repeating.)*

Big big big big big. Bang!

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

(The TIDALs grab ahold of SINGULARITY.)

[The Center of the Universe]

[The light shifts to the dome home on stage.]

~~{The home does not yet contain a vantablack 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.~~)

### GRAVITY

(Adorably as a puppy.)

Force! Force! Force!

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

### SINGULARITY

The Gravity of it all!

(Increasingly bonds with puppy GRAVITY. They may hear their past family praying for them.)



### **MULTIVERSITY 1/ϕ**

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

### **MULTIVERSITY 2/X**

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

### **MULTIVERSITY 1/Ψ**

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

### **MULTIVERSITY 2/Ω**

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

### **MULTIVERSITIES**

Singularity is where the heart is.

### **SINGULARITY**

I CAN SEE...  
THE TIDES HAVE TURNT.

*(Timidly interacting with the TIDALs.)*

IN-DEBT...

### **TIDALs**

*(Gratefully howling.)*

Fall!

*[End of "In-Depth."]*