

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
Janelle Lawrence	Musical Theatre Mentor
Emily McClain	First Reader
Alexis McKay	Fireworks/Stage Manager
Jordan Ealey	Hat/Dramaturg
Daniela Cobb*	SPT0615-JD
Minka Wiltz *	Singularity
Vallea E. Woodbury	Gravity
Jason-Jamal Ligon	Cartwheel
Skye Passmore	Whirlpool
Abby Holland	Triangulum
Daniel Sakamoto-Wengel	Andromeda
Evan Phillips	Milky Way
Isake Akanke Jeff Hathcoat Kate Jacoby Bryan Montemayor 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 like human beings, as we want to get out and explore. The analogy is expressed through these cosmic personifications. 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 relative experience.

The teenage Galaxies begin 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 the table ("[Crunch](#)"). JD still looks out, tangentially wanting to go to the Edge ("[Cutting Edge](#)"). They see their future as apparent. However, Singularity speaks of its perils and sends them to bed ("[Fixed Stars](#)"). Letting JD out of bed, Triangulum outlines their family values ("[Anomaly is Everything](#)"). Eager for a voyage anyways, 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](#)").

Triangulum decides to journey out to the Edge with Andromeda. They instruct Cartwheel and Whirlpool to babysit Milky Way. However, Cartwheel and Whirlpool heads out as well. Elsewhere, JD and Gravity are on an adventure ("[Verse](#)"). Soon, Cartwheel and Whirlpool decide to return home ("[Time is Relative](#)"). They come to find that Milky Way ("[Spaghetti Horizon](#)"). 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](#)").



A trillion years pass, and JD and Gravity are still traversing space. They find time to play fetch, and Gravity catches on JD's fugue. Through a stellar speech, Gravity explains that the point of return is far-fetched. When retrieving a star, Gravity accidentally fetches over Singularity's eye ("[Far-Fetched](#)").

From the Center, Singularity awakens ("[Point](#)").

In the following act, Singularity's backstory is presented. Apparently, they ran away from their own Universe themselves ("[Heat Death](#)"). Presently, JD and Gravity discuss their lives. Soon, most siblings have clustered together ("[Bounce Back](#)"). They intercept JD and Gravity, where they take them as captives. The Galaxies break JD's spirit and scope ("[The Scope of Things](#)"). Regardless, JD dreams to do what their parent did ("[Apparent](#)"). Milky Way visits their cell to talk about their journey. Soon, they accidentally help JD and Gravity escape ("[Big Rip](#)"). After the dust settles, Singularity shows up to bring most of the Galaxies home ("[It's About Spacetime](#)").

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 ("[...](#)"). JD tries to give back Singularity's eye when they return. However, Singularity cannot forgive JD. JD jumps off the Ellipse ("[Shed Light](#)"). In these millennia of grief, the siblings hold each other close ("[*](#)"). Singularity takes in their eye, restoring their depth perception. Singularity looks beyond. JD sheds 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 Spaghettification 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 after it, 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 the wide-open space.	Tidal Force	Any
<u>SPT0615-JD</u> The distant galactic sibling. JD wants to shed light and be apparent to the lightless.	Embryonic Galaxy	Young Adult
<u>CARTWHEEL</u> The aerobic galactic sibling. Cartwheel wants to earn their ring.	Ring Galaxy	Teenager
<u>WHIRLPOOL</u> The anaerobic galactic sibling. Whirlpool wants to spiral into enlightenment.	Grand-Design Spiral Galaxy	Teenager
<u>TRIANGULUM</u> The jingoistic galactic sibling. Triangulum wants to be the role model.	Spiral Galaxy	Teenager
<u>ANDROMEDA</u> The scenic galactic sibling. Andromeda wants to find the pearl in this universal oyster.	Spiral Galaxy	Teenager
<u>MILKY WAY</u> The angelic galactic sibling. Milky Way wants to make themselves useful.	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>	Elliptical Galaxy	Onlooker
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.		



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	Bounce	JD CARTWHEEL WHIRLPOOL TRIANGULUM ANDROMEDA MILKY WAY SINGULARITY	
2.	24	Crunch	SINGULARITY CARTWHEEL WHIRLPOOL TRIANGULUM ANDROMEDA MILKY WAY JD GRAVITY <i>tidals</i>	
3.	25	Cutting Edge	JD CARTWHEEL WHIRLPOOL TRIANGULUM ANDROMEDA MILKY WAY GRAVITY SINGULARITY	
4.	33	Fixed Stars	SINGULARITY WHIRLPOOL JD CARTWHEEL TRIANGULUM ANDROMEDA MILKY WAY	
5.	37	Anomaly is Everything	TRIANGULUM JD	
6.	39	Zilch	JD <i>tidals</i>	
7.	44	Luminous	SINGULARITY JD CARTWHEEL WHIRLPOOL TRIANGULUM ANDROMEDA MILKY WAY	
8.	45	Big Bang	JD SINGULARITY GRAVITY WHIRLPOOL CARTWHEEL TRIANGULUM ANDROMEDA MILKY WAY <i>tidals</i>	
9.	61	Verse	JD GRAVITY	
10.	70	Time is Relative	CARTWHEEL WHIRLPOOL	
11.	79	Spaghetti Horizon	CARTWHEEL WHIRLPOOL <i>tidals</i> SINGULARITY	
12.	86	Warp, Waves, and Wrinkles	MILKY WAY solar systems	
13.	92	Globular	ANDROMEDA TRIANGULUM	
14.	95	Fabric	TRIANGULUM ANDROMEDA MILKY WAY <i>tidals</i>	
15.	103	Far-Fetched	GRAVITY JD	
16.	107	Point	SINGULARITY multiplicities <i>tidals</i>	
17.	110	Heat Death	SINGULARITY multiplicities	
18.	124	Bounce Back	CARTWHEEL WHIRLPOOL TRIANGULUM ANDROMEDA MILKY WAY	
19.	130	The Scope of Things	TRIANGULUM CARTWHEEL WHIRLPOOL ANDROMEDA MILKY WAY JD GRAVITY	
20.	138	Apparent	JD ABELL	
21.	143	Big Rip	JD GRAVITY CARTWHEEL WHIRLPOOL TRIANGULUM ANDROMEDA MILKY WAY <i>tidals</i>	
22.	145	It's About Spacetime	SINGULARITY CARTWHEEL WHIRLPOOL TRIANGULUM ANDROMEDA MILKY WAY	
23.	149	Parallax	GRAVITY JD	
24.	152	Tangent	JD GRAVITY	
25.	157	...	GRAVITY <i>tidals</i> JD	



♯	Page	Title	Characters	◦Present but unvocal
26.	166	Shed Light	JD SINGULARITY GRAVITY TRIANGULUM CARTWHEEL WHIRLPOOL ANDROMEDA MILKY WAY	
27.	170	*	ANDROMEDA WHIRLPOOL CARTWHEEL MILKY WAY TRIANGULUM SINGULARITY	
28.	172	Hearts in the Right Place	JD SINGULARITY TRIANGULUM ANDROMEDA MILKY WAY WHIRLPOOL CARTWHEEL ABELL multiplicities	
29.	173	(The Spaghetification of) Zenith	GRAVITY SINGULARITY CARTWHEEL WHIRLPOOL TRIANGULUM ANDROMEDA MILKY WAY tidals	
30.	181	Big Crunch	SINGULARITY WHIRLPOOL CARTWHEEL TRIANGULUM ANDROMEDA MILKY WAY tidals	
31.	184	Big Bounce	COMPANY	
		Able	ABELL	

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

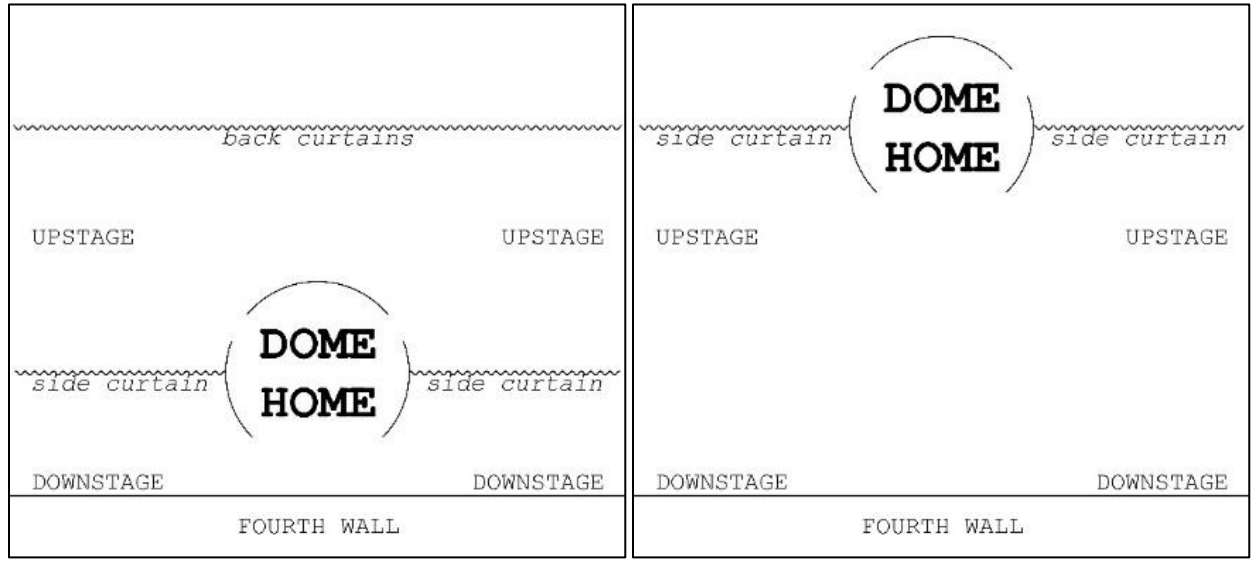
Act	Page	Location	SET props
Ii	15	The Center of the Universe	DOME HOME FIELD EQUATIONS RUG SEATS (7) TABLE balls Big Bang Taser dishes knapsack monoculars (2) snow globe whoopie cushion
Iii	61	The Fabric of Spacetime	FIELD EQUATIONS (including $f=ma$, $v=H_0 \cdot D$, $\Delta t = (\Delta t_0) / \sqrt{1-v^2/c^2}$) 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)

