

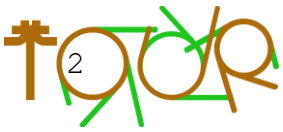
WORKING TIDAL

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A Musical

by

David Quang Pham



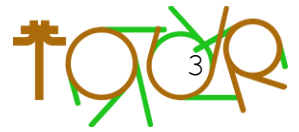
## SYNOPSIS

An astrophysics fable, WORKING TIDAL centers a family of galaxies trying to reverse the Big Bang, after one of them sets it off. This musical follows a teenager and their dog running away from home. SPT0615-JD, a galaxy, 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 Hubble's 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 galactic siblings begin their routine by staring out with their monoculars ("[Bounce](#)"). 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 ("[Bedrock](#)"). Eager for a voyage anyways, JD finds Singularity's BB Taser stashed under their rug. JD deems the fabric of spacetime to be 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 Singularity and takes their eye. Then, JD flees with Gravity to the edge, but the edge keeps distancing from them. It is like a rolled-up carpet 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](#)"). Triangulum, Andromeda, and Milky Way stay together but keep their distance ("[Compartmentalize](#)"). Others try to quit and go home ("[Break](#)"). But they face Singularity's attack dogs, who ensure that no siblings merge ("[Huddle](#)"). Soon, Milky Way develops a tumor called the Solar System ("[Shingles](#)"). Despite Triangulum's objections, Andromeda comes to the aid of Milky Way and merges. 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 too long and



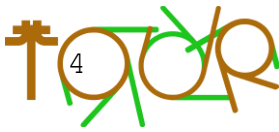
Gravity catches on JD's fugue. Through a stellar speech, Gravity explains that the point of return is far-fetched ("[Far-Fetched](#)").

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 huddled together ("[Bounce Back](#)"). They reach JD and Gravity ("[Accretion](#)"). JD rejects them and races to the edge ("[Dust](#)"). While scoping the space, Triangulum sees Singularity again ("[Scope](#)"). Singularity calls off the dogs ("[Fabricate](#)"). The siblings make their way home ("[Eccentricity](#)").

At last, JD and Gravity make it to the edge. 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 ("[A Door](#)"). They do not forgive JD. After giving Gravity one last hug, JD jumps off the edge ("[Dropout](#)"). In this millennia of grief, the siblings hold each other close ("[Centers](#)"). Singularity chooses to take in their eye, restoring their depth perception ("[In-Depth](#)"). Singularity looks beyond. JD is among an audience. To the eye of the beholder, it is a space filled with 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 ("[Working Tidal](#)"). 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](#)").

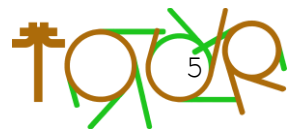


## CHARACTER BREAKDOWN

Character	Vocal Tone & Range	Identity
<u>SPT0615-JD</u> A distant galactic sibling.	Any	Teenager
<u>SINGULARITY</u> The relativistically impossible guardian.	Any	Adult
<u>GRAVITY</u> A tidal dog. JD's companion.	Any	Any
<u>TRIANGULUM</u> A galactic sibling.	Any	Teenager
<u>ANDROMEDA</u> A galactic sibling.	Any	Teenager
<u>MILKY WAY</u> A galactic sibling.	Any	Teenager
<u>WHIRLPOOL</u> A galactic sibling.	Any	Teenager
<u>CARTWHEEL</u> A galactic sibling.	Any	Teenager
<b>Ensemble</b>		
- TIDALS		

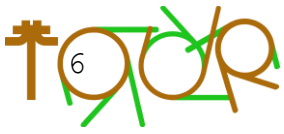
## SCENES & SET DESIGNS

Act	Page	Location	SET   props
Ii	7	The Center of the Universe	HOME TABLE SEATS whoopie cushion monoculars dishes telescope
Iii	—	The Fabric of Spacetime	
I	—	The Center of the Universe	
Iii	—	The Fabric of Spacetime	
Iiii	—	The Center of the Universe	



## MUSICAL NUMBERS

♪ #	Page	Title	Character (s)
1.		Bounce	GALAXIES
2.		Crunch	SINGULARITY GALAXIES but JD TIDALS
3.		Cutting Edge	JD GRAVITY GALAXIES
4.		Bedrock	SINGULARITY GALAXIES
5.		Sweep under the Rug	JD
6.		Hinge	SINGULARITY GALAXIES
7.		Big Bang	COMPANY
8.		Depth	SINGULARITY TIDALS
9.		Apartment	TRIANGULUM ANDROMEDA MILKY WAY
10.		Compartmentalize	TRIANGULUM ANDROMEDA MILKY WAY
11.		Break	WHIRLPOOL CARTWHEEL
12.		Huddle	TIDALS
13.		Far-Fetched	JD GRAVITY
14.		Shingles	MILKY WAY
15.		Fabric	TRIANGULUM ANDROMEDA MILKY WAY TIDALS
16.		Wrong Space	SINGULARITY
17.		Bounce Back	GALAXIES but JD TIDALS
18.		Accretion	GALAXIES
19.		Dust	GALAXIES
20.		Scope	SINGULARITY TRIANGULUM ANDROMEDA MILKY WAY
21.		Fabricate	SINGULARITY
22.		Edge	JD GRAVITY
23.		Eccentricity	SINGULARITY GALAXIES but JD
24.		A Door	SINGULARITY GALAXIES
25.		Dropout	JD
26.		Hub	GALAXIES
27.		In-Depth	SINGULARITY
28.		Hearts are in the Right Place	JD
29.		Working Tidal	TIDALS
30.		Big Crunch	SINGULARITY GALAXIES
31.		Big Bounce	COMPANY



## ACT I

## 1. BOUNCE

*[The Center of the Universe]*

*[An observatory-inspired house is stationed in the center towards upstage. There is a table with seats in its center.]*

*[The light circularly dwells within the home. The stage outside remains dark.]*

*(JD arrives, carrying two monoculars. They position themselves at the edge of the home. They look out through both monoculars.)*

*(TRIANGULUM wanders out, looking for their monocular. They head to JD. They notice that JD is holding two monoculars. They snatch a monocular from JD. They look out through a monocular.)*

**TRIANGULUM**

NOTHING.

*(WHIRLPOOL twirls out. They look out through a monocular.)*

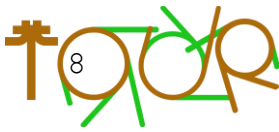
**WHIRLPOOL**

NOTHING!

*(CARTWHEEL cartwheels out. They look out through a monocular.)*

**CARTWHEEL**

NOTHING!



*(MILKY WAY appears disheveled. They stroll in.)*

*(ANDROMEDA accompanies MILKY WAY.)*

*(ANDROMEDA and MILKY WAY look through their monoculars.)*

**ANDROMEDA**

NOTHING.

**MILKY WAY**

NOTHING...

**GALAXIES but JD**

LET'S BOUNCE!

*(GALAXIES, but JD, choreographically move alongside the edge of the home.)*

*(SINGULARITY remains absent.)*

**SINGULARITY**

MILKY WAY!

*(MILKY WAY lugs their way to a seat at the table.)*

ANDROMEDA!

*(ANDROMEDA heads to a seat at the table.)*

TRIANGULUM!



*(TRIANGULUM bounces off the walls of the home before landing at a seat at the table.)*

## **SINGULARITY (cont.)**

WHIRLPOOL!

*(WHIRLPOOL twirls into a seat at the table.)*

CARTWHEEL!

*(CARTWHEEL cartwheels into a seat at the table.)*

JD!

*(JD remains at the edge of the home, staring through their monocular.)*

## **2. CRUNCH**

*(SINGULARITY arrives, with empty dishes. They set the dishes on the table.)*

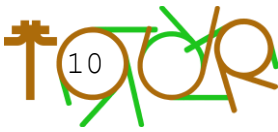
*(TIDALS crawl in. They surround the table.)*

## **SINGULARITY**

It is that time.

*(Placing a dish on the ground.)*

*(TIDALS feast on the dish on the ground.)*



*(GALAXIEs at the table sit themselves.)*

*(TRIANGULUM sits on a whoopie cushion.)*

### **SINGULARITY**

Looks like someone enjoyed a little too much gas giants.

*(WHIRLPOOL and CARTWHEEL hold in their laughter.)*

### **WHIRLPOOL**

What you got cooking up?

### **CARTWHEEL**

What are we having...

### **SINGULARITY**

I ask first... Has anyone of you got anything stellar cooked up?

*(Displaying one of the GALAXY's monoculars.)*

### **TRIANGULUM**

The usual. For the past googolplex days, nothing. But the red giants are new.

*(Tossing the whoopie cushion at WHIRLPOOL.)*

### **SINGULARITY**

Well, I cooked you all something special. Yellow star systems.

*(Handing dishes to each GALAXY at the table.)*

A variety of nutrition from the crusts of rocky planets.  
Dismantle the mantle. But leave the core. I'd love to planet these.

*(MILKY WAY dives into their dish.)*

## TRIANGULUM

Again, Milky Way?

## ANDROMEDA

It's mostly photons, Triangulum.

## CARTWHEEL

It takes eight millennia to burn that, Andromeda.

## WHIRLPOOL

A simple nap lasts just as long, Cartwheel.

*(SINGULARITY addresses TRIANGULUM.)*

## SINGULARITY

You want to go through accretion and be a big spiral galaxy, don't you?

## CARTWHEEL

You all are morbidly spiral galaxies.

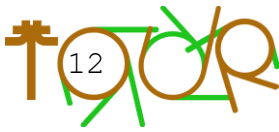
## ANDROMEDA

Does it ring any bell, ring galaxy?

*(MILKY WAY sets down their dish.)*

## MILKY WAY

All bark and no bite, just like our Tidals here. Your weight on us is sparse.



## **CARTWHEEL**

Ring galaxies ring true. And truth is sparse...

*(Growing self-aware of their slimness.)*

## **SINGULARITY**

Let us step in our truths.

*(Having a hand on their chest, they position  
that hand as though it is holding a heart.  
Another hand sits flatly under the hand.)*

*(GALAXIEs, but JD, emulate SINGULARITY.)*

## **SINGULARITY**

HOLD THAT HOLE IN YOUR HEART.  
GIVE INTO INTERNAL DARKNESS.  
HOLD OUR LIGHT FOR ALL TIME.  
FOR IT'S CRUNCH TIME, GALAXIES.  
IN BLACK HOLES, DWELL WISDOM.  
FED BY THE SPRINKLES OF STARDUST.  
HOLD THEIR DREAMS IN YOUR PALM.  
IT IS CRUNCH TIME, MY BABIES.

*(SINGULARITY and GALAXIEs, but JD, chorally  
pray.)*

## **SINGULARITY**

## **GALAXIEs but JD**

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

## **GALAXIEs but JD**

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

# MILKY WAY

IT IS CRUNCH TIME, SINGULARITY.

# ANDROMEDA

IT IS CRUNCH TIME, SINGULARITY.

# TRIANGULUM

IT IS CRUNCH TIME, SINGULARITY.

# WHIRLPOOL

IT IS CRUNCH TIME, SINGULARITY.

# CARTWHEEL

IT IS CRUNCH TIME, SINGULARITY.

*(SINGULARITY waits.)*

# SINGULARITY

IT IS CRUNCH TIME, JD?  
SPT0615-JD?

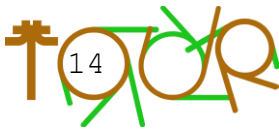
## 3. CUTTING EDGE

*(GRAVITY splits from TIDALs. They stroll to JD, to be their canine companion.)*

# JD

NOT THE TIME, GRAVITY.

*(GRAVITY adamantly places their paw on JD's monocular.)*



*(JD puts down the monocular.)*

**JD** (cont.)

WELL, TO CUT.

IN LIGHT OF OUR HOME FIT ONLY FOR SINGULARITY.

WHAT ELSE TO DO IN THIS DOME?

*[The composer-lyricist is still figuring out how to begin this "I Want" song. In "Cutting Edge," JD answers:]*

*- What influenced this galactic teenager?*

*- How do they have different influences than their siblings, who all were raised under the same household for an eternal time?*

*Why do the other Galaxies not want what JD wants?*

*- Is JD the oldest/wisest of all the Galaxies?]*

*[This is ending verses of the song.]*

**JD**

THIS PLACE IS CONFINED.

THIS PLACE IS BIZARRE.

THIS SPACE DOES NOT HEAR THE END OF MY VERSE.

OUTER SPACE HAS A CALLING SIGN.

WHAT SPEAKS TO MY HEART...

IT SAYS TO REACH THE EDGE OF THE UNIVERSE!

*(GALAXIEs at the table ironically hear JD.)*

**GALAXIEs but JD**

THE EDGE OF THE UNIVERSE?!

**JD**

CUTTING THE LINE BETWEEN

DERIVATION AND INTEGRATION!

**GALAXIEs but JD**

JUST SEND US ON A TANGENT WHY DON'T YA?

**JD**

CUTTING OFF MISCOMMUNICATION!

**GALAXIEs but JD**

YOU ARE LOSING US?!

**JD**

CUTTING OUR FINGERS ON...!

**GALAXIEs but JD**

WE GET IT NOW. YOU WANT THIS BADLY!

**JD**

THE FABRIC OF SPACETIME-IME-IME!

**GALAXIEs but JD**

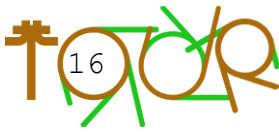
THAT'S US. ALL OF US.

**JD**

LET'S BE THE CUTTING EDGE.

**GALAXIEs but JD**

CUTTING EDGE? CUTTING EDGE?



**JD**

TO EDGE OUT WHAT IS  
DERIVATION AND INTEGRATION!

**GALAXIEs but JD**

WE'LL GO ABOUT IT ON A COTANGENT.

**JD**

TO EDGE OUT ALL COMMUNICATIONS!

**GALAXIEs but JD**

THAT MAKES NO SENSE!

**JD**

TO EDGE OUT THESE FINGERS WITH...!

**GALAXIEs but JD**

GO OFF. YOU WANT THIS BADLY!

**JD**

THE FABRIC OF SPACETIME!  
LET'S BE THE CUTTING EDGE.

*(GRAVITY barks the word.)*

**GRAVITY**

Force!

*(JD hugs GRAVITY.)*



JD

I, however, do love my Gravity.

*(SINGULARITY accompanies JD and GRAVITY.)*

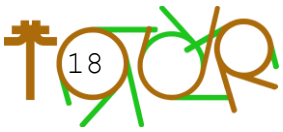
And Singularity... Mom / Dad?

## FILLER SYNOPSIS

In this musical number, JD is still looking out. They just want to go to the edge of the universe. However, Singularity speaks of its perils and sends them to bed. Eager for a voyage anyways, JD finds Singularity's BB Taser stashed under their rug. JD deems the fabric of spacetime to be as sturdy. Later, Singularity assesses each of their child's black-hole hearts. With this being the final straw, JD shoots Singularity and takes their eye. Then, JD flees with Gravity to the edge, but the edge keeps distancing from them. It is like a rolled-up carpet that JD keeps rolling away. This event came to be known as the Big Bang.

Heartbroken, Singularity kicks out their children and has them spend eternity trying to roll back the edge. The siblings blame one another for kickstarting the universe. Triangulum, Andromeda, and Milky Way stay together but keep their distance. Others try to quit and go home. But they face Singularity's attack dogs, who ensure that no siblings merge. Soon, Milky Way develops a tumor called the Solar System. Despite Triangulum's objections, Andromeda comes to the aid of Milky Way and merges. Before the dogs could pounce, Milky Way emits flares of light that scare them off.

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



### 13. FAR-FETCHED

*[The Fabric of Spacetime]*

*(JD and GRAVITY wander.)*

**JD**

A trillion years...

*(Grabbing a ball.)*

Fetch, Gravity.

*(Tossing the ball.)*

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.)*

**GRAVITY**

Refresh?

*(JD woofs the word.)*

**JD**

...Force?

**GRAVITY**

We have this one flare like these, every million years then we continue threading along the fabric of spacetime. Don't stall on this now. The edge of the universe is just beyond the horizon.

**JD**

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.

**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.

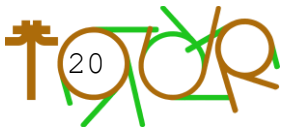
**GRAVITY**

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

**JD**

But on this voyage, you learnt to speak galactic being... Or I learnt how to speak tidal dog... Whether or not, I have grown in the worst ways possible.

*(GRAVITY 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**

Your tidal dog whispering is a bit low in escape velocity... So, your voice will carry far...

*(JD exhaustedly looks out.)*

**JD**

Far, far away...

**GRAVITY**

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

**JD**

SINGULARITY.

**GRAVITY**

APPARENTLY  
WILL NOT FORGET.  
WILL NOT FORGIVE.  
CAN I FORETELL?

**GRAVITY** (cont.)

CAN'T YOU FORESEE?  
THIS IS FAR-FETCHED.

*(Snatching the ball. They toss it in the direction of the center of the universe.)*

GO FETCH THE STAR...

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

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.

*(Heading to JD's side. They point to the ball.)*

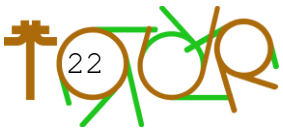
WE'RE ON THE SAME WAVELENGTH.  
YOU'RE SPEAKING TIDAL FORCE NOW.  
THAT ONCE SEEMED AS THOUGH FAR-FETCHED.

**JD**

IT GIVES ME PAUSE.

**GRAVITY**

IMPLAUSIBLE.  
DOES IT GIVE YOU PAUSE WITH ALL OF YOUR ACCRETE  
THINKING?



## GRAVITY (cont.)

DOES IT GIVE YOU PAUSE THAT THE STRINGS WE WALK ON ARE STRUMMED?

DOES IT GIVE YOU PAUSE WHENEVER YOU BE SHOOTING STARS?

*(Snatching another ball. They toss it in the direction of the edge of the universe.)*

IMPLAUSIBLE.

DOES IT GIVE YOU PAUSE THAT YOU ARE FULL OF LIVING THINGS?

DOES IT GIVE YOU PAUSE ALL OF YOUR CELLS ARE STAR SYSTEMS?

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

## JD

IT'S PLAUSIBLE!

*(Dropping numerous balls. They tearfully hold their heart.)*

## GRAVITY

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

*(Nearing JD.)*

SUPERMASSIVE BLACK HOLE!

*(Jumping on and embracing JD like a dog.)*

*(TIDALs loom in the distance.)*

## TIDALs

SUPERMASSIVE HEART!

*[The atmosphere fills with flaring black holes.]*

**GRAVITY**

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

**TIDALs**

NEAR AND WELL-KEPT!

**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 reach out to each black hole.)*

**JD**

**GRAVITY**

APPARENTLY,  
WE'LL NOT FORGET.



**JD** (cont.)

WE'LL NOT FORGIVE.  
CAN WE FORETELL?  
CAN'T WE FORESEE?  
WE ARE FAR-FETCHED.

**GRAVITY** (cont.)

*(TIDALS vanish.)*

**JD**

These supermassive black holes came out of a vacuum...?

*(Observing closer. They recognize one of  
their siblings.)*

It's Milky Way. The other Galaxies will be near. We got to  
hubble!

*[The flaring black holes fade away.]*

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

*(MILKY WAY stumbles in. They fall flat on  
their face.)*

*(JD and GRAVITY dash off.)*

*(TRIANGULUM and ANDROMEDA stroll in. They  
keep their distance.)*