



11. 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...

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

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 (cont.)

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 rotate
counterclockwise.)*

CARTWHEEL

DOWNTIME.

(WHIRLPOOL spirals clockwise in place.)

CARTWHEEL

I CAN'T FACE TIME.

WHIRLPOOL

PLEASE DO FACE TIME.

WHIRLPOOL

Time goes slower the further you move into one's gravity. So, your black-hole heart is younger than how you look. Really, you're naïve and scared on the inside. Life went by 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. However, we ain't present for our baby sibling. We will miss their stages of development, from height to psyche. Sure, you yourself ain't grown a bit. But get it through your head that there will someday be no time.



CARTWHEEL

Let's steer away from the time dilat— *Dilemma*, that we face. 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.)

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.*

TIME'S NOT UP, RELATIVE.

(CARTWHEEL returns and lends a hand to WHIRLPOOL.)

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

[Their lights gradually balance one another.]



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

CARTWHEEL

WHIRLPOOL

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

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

WHIRLPOOL

TIME IS RELATIVE.
FAMILY HAS COME TO YOUR SENSES.

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.]*



CARTWHEEL

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 home returns, wheeled downstage.]