

**From:** Jeffrey Epstein <jeevacation@gmail.com>  
**To:** Lisa Randall <[REDACTED]>  
**Subject:** Re:  
**Date:** Sun, 04 Oct 2009 19:22:23 +0000

---

6 is fine 561 655 7626 or send number

On Sun, Oct 4, 2009 at 2:30 PM, Lisa Randall <[REDACTED]> wrote:  
What happened? I'll skip bad spacetime continuum joke.  
I'll be back about 6. Let me know if you will have time.

Jeffrey Epstein wrote:  
if 2 is good is there a number to call?

On Sun, Oct 4, 2009 at 12:34 PM, Jeffrey Epstein <jeevacation@gmail.com  
<mailto:jeevacation@gmail.com>> wrote:

2pm?

On Sun, Oct 4, 2009 at 11:21 AM, Lisa Randall  
<[REDACTED] <mailto:[REDACTED]>>  
wrote:

Any availability in the spacetime continuum today or tomorrow?

Jeffrey Epstein wrote:

joking, for me , space and time are disconnected as my  
fingers hunt for keys

On Fri, Oct 2, 2009 at 6:00 PM, Lisa Randall  
<[REDACTED]  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>>> wrote:

Oops. Problem of email. No offense intended. I was really  
a little  
confused. Or were you joking?

Jeffrey Epstein wrote:

sorry,  
On Fri, Oct 2, 2009 at 5:41 PM, Lisa Randall  
<[REDACTED]  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>>>  
<mailto:[REDACTED]>

<mailto:[REDACTED]>  
<mailto:[REDACTED]>>>> wrote:

I think [REDACTED] reaching the limits of my ability to  
disentangle  
grammar  
and spelling but here goes:

Jeffrey Epstein wrote:

thanks , question , what does it look like if  
time is  
running  
backward , wouldn't it be decelerating,, into  
flat space  
from  
the singularity outward,, therefore explosion than

[then]  
expansion.  
It looks like big bang, not inflation before  
horizon. So not  
explosive expansion.

but always slowing after

crossing the horizon .

after crossing horizon there isn't really a  
cosmological  
interpretation anymore. Time and space have  
switched back.

looking in reverse it appears things accelerate

as they approach,, charged would be as a  
result of the  
deceleration.

don't understand this last comment.

On Fri, Oct 2, 2009 at 5:27 PM, Lisa Randall

<[REDACTED]>  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>>  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>>>  
<mailto:[REDACTED]>

<mailto:[REDACTED]>  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>>  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>  
<mailto:[REDACTED]>>>>> wrote:

Hi Jeffrey. It was interesting-as always.  
For your question, let's first straighten  
out that  
there are  
3 types  
of bhs we might be discussing:  
Schwarschild, charged,  
and Kerr. I  
didn't say much about Kerr--I mostly  
discussed charged--  
since they  
are changing with time and a bit more  
complicated but  
indeed they  
have 2 horizons (just like charged black  
holes).

Two horizon scenario means time and space  
switch twice  
so at  
singularity you are back to ordinary time space  
identification. So  
let's first just consider Schwarzschild  
(uncharged, not  
rotating). In  
that case you are on the right track.  
Reversing time and  
coming from  
the singularity, it pretty much looks like  
a 2d big  
bang scenario  
(with the other 2d in a compact sphere).  
Space expands out  
until you  
reach the horizon and eventually goes over  
into flat  
space.  
It's not  
really accelerated expansion but still  
somewhat along  
lines you  
suggested.

If there are two horizons (charged black  
hole case)  
and you

are in  
between them (we called this Whoville  
because it looks  
like space  
has shrunk to zero but actually spacetime  
has not and  
there is a  
finite time between them so there's a whole  
world  
invisible  
to the  
outside) what happens is you alternate  
between big  
bang and big  
crunch in the full extended spacetime.

Jeffrey Epstein wrote:

Lisa . thanks,, for your time,and  
patience if i  
understand the  
Kerr equations , and your explanation  
correctly , time  
and space  
appear to exchange coordinates , inside  
a black  
hole. ,  
that  
assumes that time is unidirectional.  
doesn't it appear  
that if  
you ran negative time , it would look  
like any other  
explosive  
transaction. great acceleration.  
emanating from  
the second  
horizon outward slowing to a mere  
expansion . It  
would  
appear  
that " time" got shot out of the black  
hole.  
created by a  
space  
collapse at the singularity.

--

\*\*\*\*\*

The information contained in this  
communication is  
confidential, may be attorney-client





-- \*\*\*\*\*

The information contained in this communication is confidential, may be attorney-client privileged, may constitute inside information, and is intended only for the use of the addressee. It is the property of Jeffrey Epstein

Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify us immediately by return e-mail or by e-mail to [jeevacation@gmail.com](mailto:jeevacation@gmail.com) <<mailto:jeevacation@gmail.com>> <<mailto:jeevacation@gmail.com>> <<mailto:jeevacation@gmail.com>>>, and destroy this communication and all copies thereof, including all attachments.

-- \*\*\*\*\*

The information contained in this communication is confidential, may be attorney-client privileged, may constitute inside information, and is intended only for the use of the addressee. It is the property of Jeffrey Epstein

Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify us immediately by return e-mail or by e-mail to [jeevacation@gmail.com](mailto:jeevacation@gmail.com) <<mailto:jeevacation@gmail.com>>, and

destroy this communication and all copies thereof, including all attachments.

--

\*\*\*\*\*

The information contained in this communication is confidential, may be attorney-client privileged, may constitute inside information, and is intended only for the use of the addressee. It is the property of Jeffrey Epstein

Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify us immediately by return e-mail or by e-mail to [jeevacation@gmail.com](mailto:jeevacation@gmail.com) <<mailto:jeevacation@gmail.com>>, and

destroy this communication and all copies thereof,  
including all attachments.

--  
\*\*\*\*\*

The information contained in this communication is confidential, may be attorney-client privileged, may constitute inside information, and is intended only for the use of the addressee. It is the property of Jeffrey Epstein  
Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify us immediately by return e-mail or by e-mail to [jeevacation@gmail.com](mailto:jeevacation@gmail.com), and destroy this communication and all copies thereof, including all attachments.