

# black holes

The Urth list — 2 messages, 2 voices, 04 Jul 1998

<https://urth.darkrealm.vip/thread/urth/916>

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Matthew Freestone — 04 Jul 1998, 13:32

Hi,

Just thought I'd add my bit to the black hole debate:

Prion wrote:

as the hole absorbs the matter right next to it  
while in the sun, it grows larger and its gravitational force grows as  
well, in a self-feeding cycle that only ends after all of the sun's  
matter has been drawn into it, which occurs more and more quickly as  
it absorbs the matter right next to it at almost the speed of light  
all the time, and it's surface area increases the more it absorbs.

This sounds right - it's a positive feedback cycle, but it doesn't prove your claim that the process only takes a few seconds: it depends how big the black hole was to start with, and on the rate of growth. Not being an astrophysicist, I'm not sure how to calculate these things, but the point is that this is an argument where you need the numbers, not the handwaving version.

Cheers,

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Jon Camfield — 04 Aug 1998, 11:02 · follows Matthew Freestone

(Intro: 'lo, I'm a newbie to the Urth list, but have been catching up with the archives (slowly) and have been following the recent threads. My 'nick' is GriffJon, though my name is Jon Camfield. I answer to either)

Sean Walen's argument for the sun having a wormhole rather than a black hole is interesting, and I seem to remember one character describing the phenomenon as "a worm eating the middle out of the sun" or somesuch, but... I think he overlooked one part about the black hole. There is actually some math to be done which I'm not going to do. Typhon reported that the Earth's temperature worldwide dropped .002 the first year that there was the black hole in the sun. I think that this would indicate that the sun lost a lot of it's mass to the black hole, and so we could find the general size of the hole, ideally.

But a black hole itself in the middle of the sun, before taking into account the mass it absorbs from the sun, will increase the gravity of their combined bodies, possibly enough to draw the planets in closer over time.

Of course, the problem with this is that Severian understands white- and black- holes as a kind of gateway into lower and higher universes, rather than the way we currently see them... but supposedly they still have a rather nasty gravity well, they just wouldn't increase due to what they intake. This is actually good. Typhon also said that this drop in temperatures was unexpectedly fast, and then it stablized. So, initially, the black hole+mass of original sun pulled the earth closer but at the same time cooled the sun down fast (biiiig black hole??) but over time the black hole had 'eaten it's weight' in sun, and the changes became less noticeable.

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"The most incomprehensible fact about nature is that it is comprehensible"  
-- Albert Einstein