Wormholes

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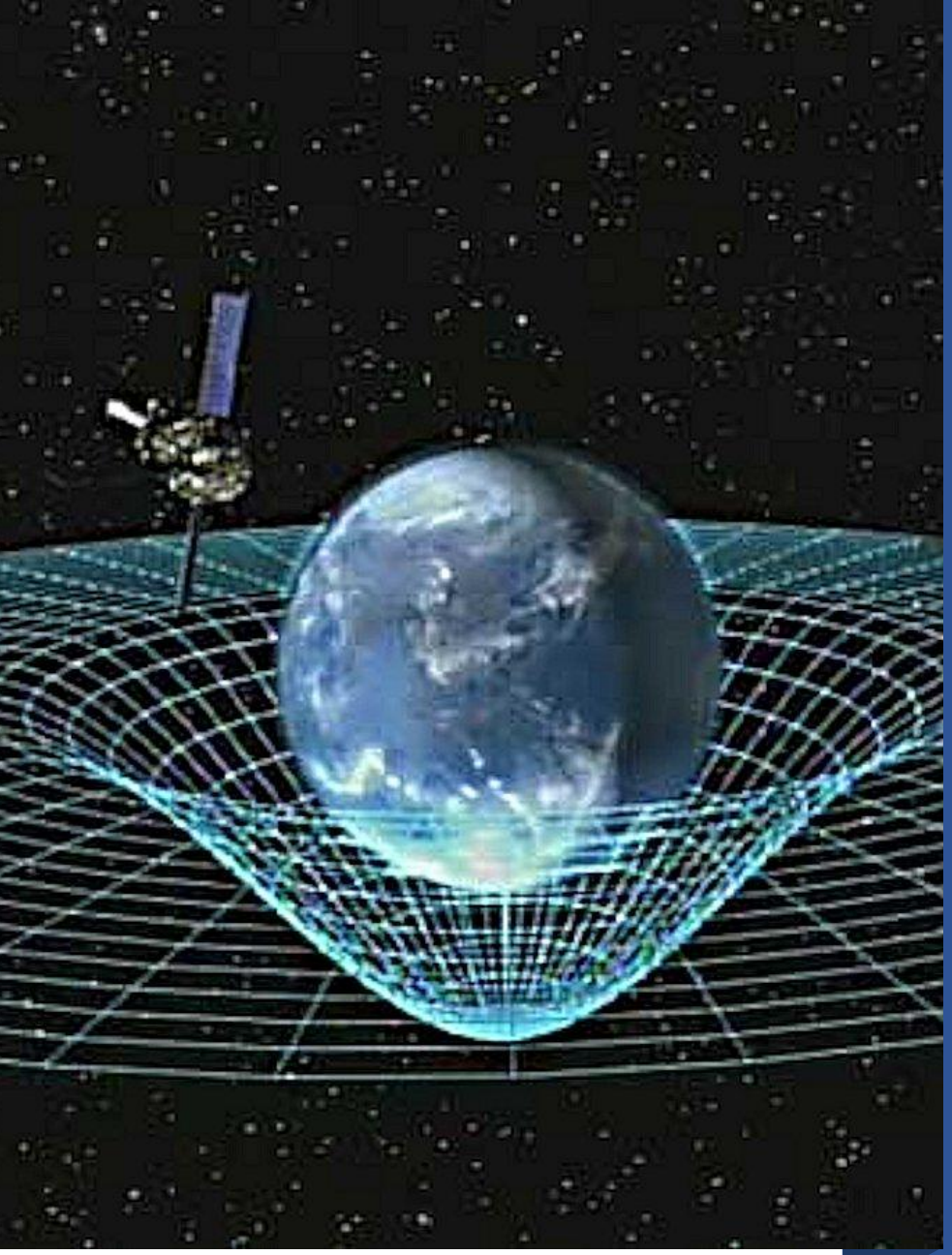


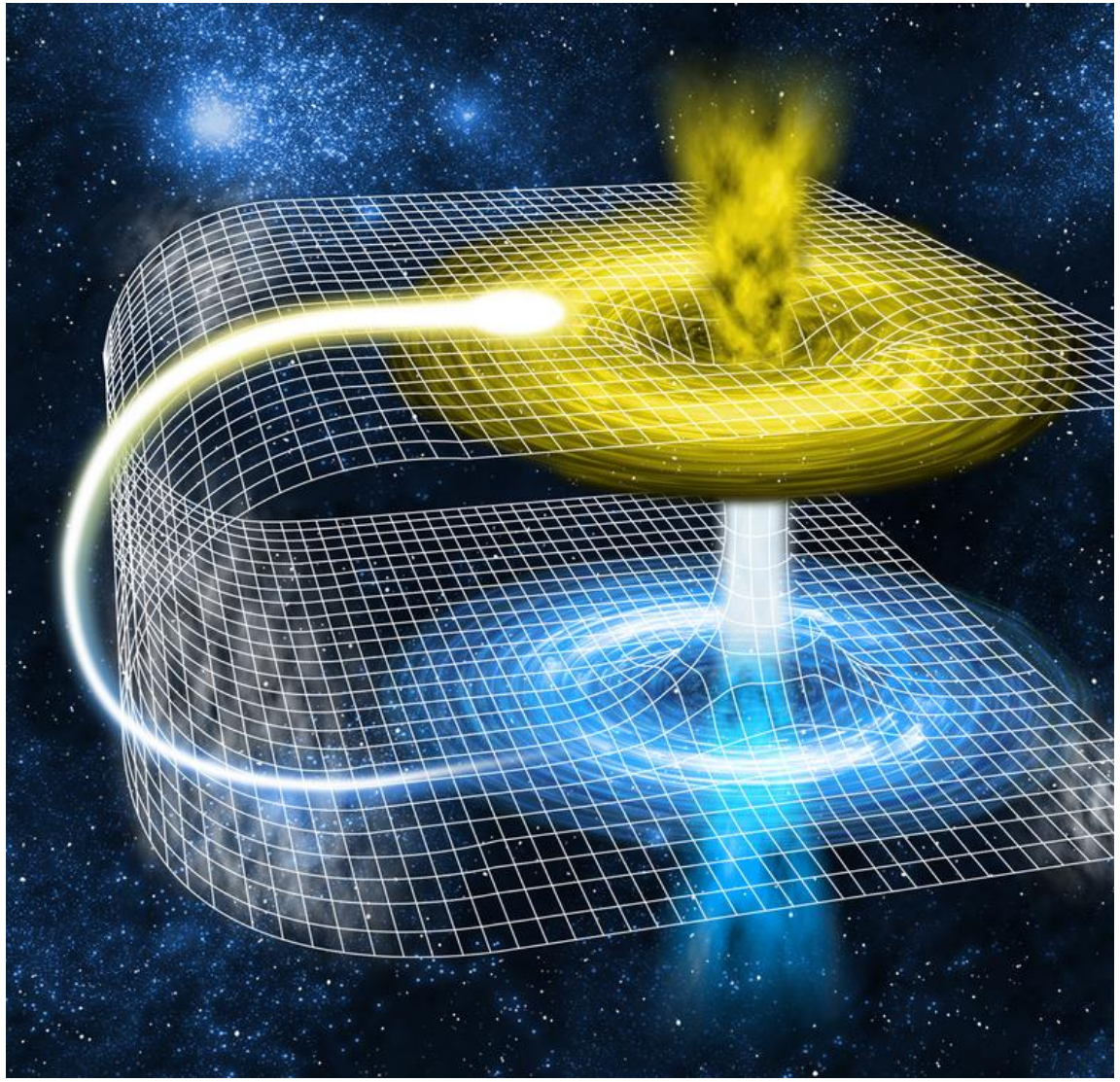
Space-time

- At the beginning of the 20th century, Albert Einstein revolutionised the idea that space and time do not exist as separate, rather it is combination of space and time to a single abstract universe i.e. space consisting of three dimensions and time is siad to have only one dimension

- Einstein said we can think of these space-time as fabric

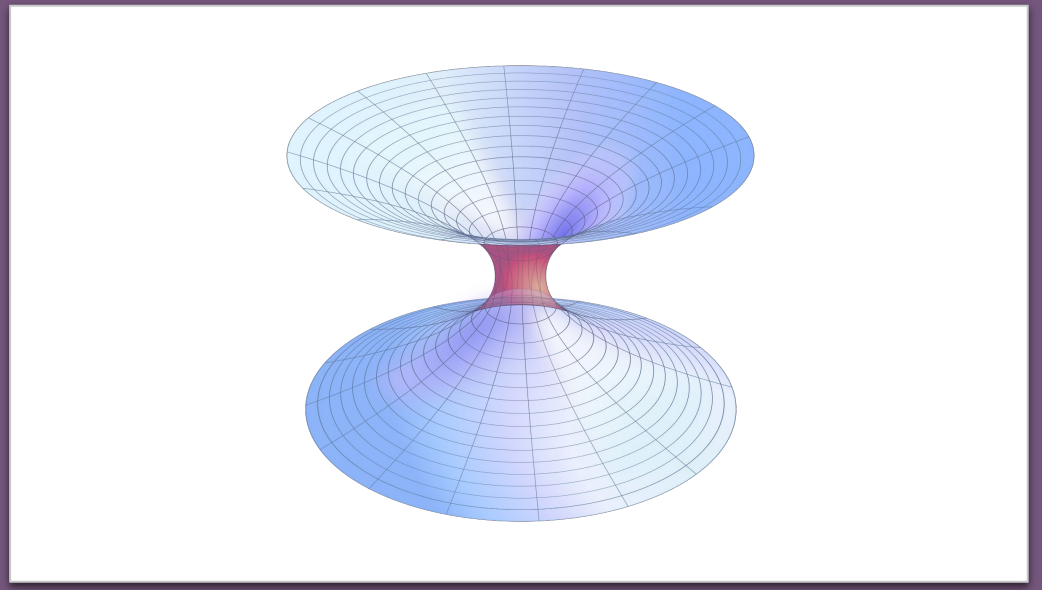
What is a wormhole

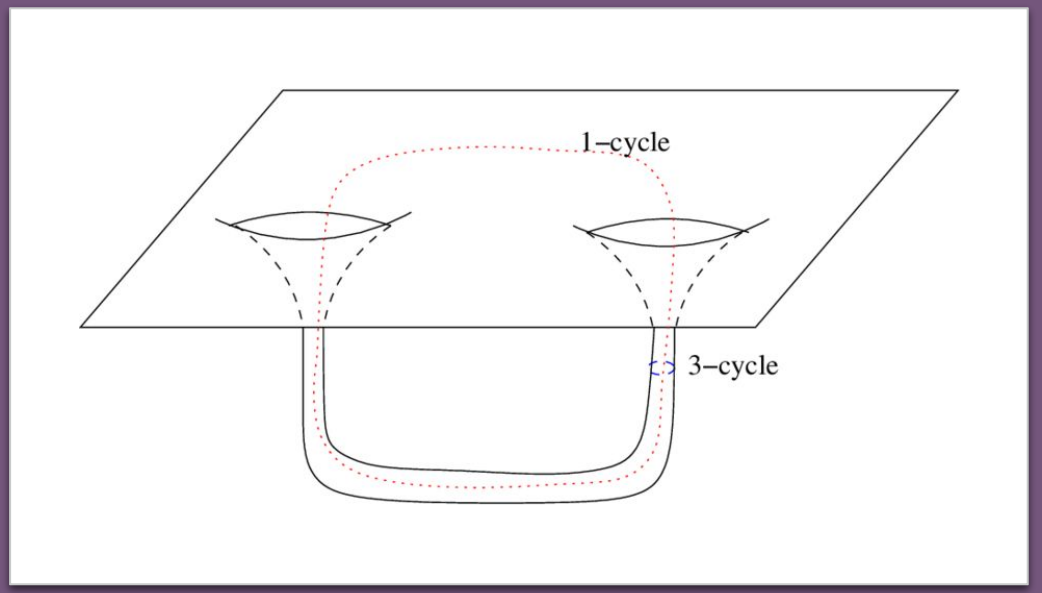
- In physics, a wormhole is a hypothetical topological feature of space-time that is essentially a “shortcut”through space and time. A wormhole has at least two mouths which are connected to a signel throat. If the wormhole is traversable, matter can ‘travel’ from one mouth to the other by passing through the throat.
- Traversable wormholes would allow travel in both directions form one part of the universe to another part of the same universe (called intra-universe) very quickly or would allow travel from one universe to another (called inter-universe).
- Travelling through a wormholes takes less time than travelling between the same distance in normal space.



Types of wormholes

- **Traversable** - These are the wormholes that we are most familiar with in science fiction. Traversable wormholes are the ones that we can pass through from one point in the universe to another.
- **Non-Traversable** - These are wormholes that nothing can pass through, either because the wormhole collapses; it only has an entry point, but no exit; or the person or particle entering it would be destroyed before reaching the other side.
- **One-way** wormholes are one-way-trip wormholes, meaning you can only travel once through them, and you would need a separate wormhole for the return trip.
- **Black Holes** - Yes, black holes are actually types of one-way wormholes. Anything can enter a black hole, but due to its intense gravitational pull nothing can escape.
- **White Holes** - Most of us have never heard of white holes, which are the opposite of black holes. Nothing can enter a white hole.
- **Two-Way** wormholes are round-trip wormholes that allow you a return voyage through the same wormhole.
- **Intra-Universe** wormholes are located in our own universe and are for traveling from one point to another within our universe.
- **Inter-Universe** wormholes connect from our universe to another parallel universe.





A portion of our universe which could contain quantum foam

Creation of wormholes


BUSINESS
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BLACKHOLES