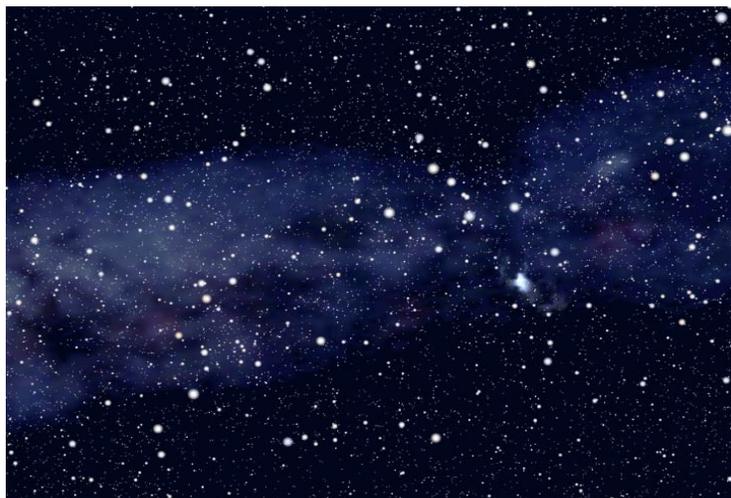


Light echoes from Tycho Brahe's 1572 supernova

This animation illustrates how a light echo works and how it can be used for time travel. A supernova explosion acts like a cosmic flashbulb. The wave of light from the explosion zips through space. When the light wave is hitting dust particles of an interstellar cloud, some light is reflected back. This reflected light forms a secondary wave of light which is delayed relative to the original one by some time – this is called light echo.

In the year 1572 the direct light wave from a supernova explosion swept past Earth and was observed by Tycho Brahe and others. Now, more than 400 years later a secondary wave of light of the supernova was observed. Using the scientific instruments of the 21st century, the mystery of the famous 16th century supernova could be solved.



Length 30 seconds

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Different video formats (including
broadcast quality) available for
download [http://www.mpia.de/IRSPACE/
Tycho_release/index.html](http://www.mpia.de/IRSPACE/Tycho_release/index.html)

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