

Speed of Light and the Flow of Time - Per Einstein

Albert Einstein and Mileva Maric decided to give-up their out-of-wedlock daughter, Lieserl. He never saw his child. It is believed she became ill and, according to news reports, any records about what ultimately happened to her do not exist.

Albert and Mileva were married while Einstein worked as a patent-office bureaucrat. He continued to work on his "thought experiments" during his spare time. As it turned out, Albert had more opportunity to pursue his scientific interests, and ideas, as a civil servant than he would ever have had as a university lecturer.

The couple had a son in 1904, Hans Albert, at about the time Einstein's thoughts on light and motion were gelling for him. Contrary to what other physicists believed, Albert was determined that the speed of light was constant everywhere in nature.

Speed is a measure of distance traveled in a unit of time. How, Einstein wondered, does that compare with the concept of motion?

If the speed of light never changes, then (Einstein reasoned) something else must vary. What if the speed of light is constant but the flow of time is not?

That question, which Einstein pondered, was completely <u>radical to everyone else</u>. How could the ticking of time waver at all?

This video clip explores the beginnings of how Einstein made the breakthrough - with his theory of special relativity - which ultimately changed the world.

Credits:

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