

Special Event

Einstein's Theory of Relativity: Outrageous, but true!

We live on a planet that is plunging through space at an alarming speed. The spin of the Earth means the ground is moving at over 1000 km/hr and as we orbit the sun the entire planet travels 30 kilometers every second. Yet we completely ignore these speeds in our daily lives. But just over one hundred years ago, it seemed some theories of physics involving light and magnetism did require us to know how fast we were traveling through the cosmos. Experimental tests of those theories all failed. Then in 1905 Einstein showed that the attitude we adopt in our daily lives should also extend to all the Laws of Physics. Never mind how fast you are going, just calculate! This simple idea had outrageous consequences for our views of time and space which Einstein showed can mix and warp depending on your point of view. We will explore some of the astonishing consequences of Einstein's theories in this lecture.