

SATURDAY SCIENCE

Solar Eclipses That Changed History

A free public lecture by
Dr. Bradley E. Schaefer



About the Lecture

In addition to being a Distinguished Professor and Alumni Professor in the Department of Physics & Astronomy at LSU, Dr. Brad Schaefer has been an amateur astronomer since the seventh grade.

Two months ago, on 21 August, many of us saw the Moon pass in front of the Sun in a solar eclipse. In modern times, eclipses are events of joy and wonder, but in not-so-old times, eclipses were viewed as deeply bad omens in the sky. Indeed, solar eclipses look like the death of some 'sun god', and were always the most fearsome and evil of celestial omens. As such, eclipses have made history, in famous events involving Columbus, Tecumseh, the Peloponnesian War, General Gordon, Nat Turner, and Albert Einstein. Einstein got involved when his prediction from General Relativity was that stars near the eclipsed Sun would be slightly shifted outwards. Einstein's prediction was famously tested by Sir Arthur Eddington at a solar eclipse in Brazil in May 1919, with Einstein being gloriously verified. Starting in the 1970's, huge numbers of people started going to see totality, to see the beauty and awesomeness and grandeur. This all climaxed on 21 August, when about 7 million people travelled to see the eclipse. Dr. Schaefer was one of them, going to Casper, Wyoming, where he made his own experimental test of Einstein's General Relativity, with modern equipment that made a test $\sim 100\times$ more sensitive than any previous Eddington's Eclipse Experiment.

21 October 2017, 10-11:00 a.m.

Room 130 Nicholson Hall, LSU

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