

2019 K-STATE PHYSICS JAMES R. NEFF LECTURE

DANIEL KENNEFICK
UNIVERSITY OF ARKANSAS

Tuesday, September 24
4:30 PM in 103 Cardwell

Refreshments at 4:00 pm in 119 Cardwell

NO SHADOW OF A DOUBT The 1919 Eclipse that Confirmed Einstein's Theory of Relativity

This is the centenary year of the celebrated eclipse expeditions which confirmed Einstein's theory of General Relativity. In 1919, British scientists led extraordinary expeditions to Brazil and Africa to test Einstein's revolutionary theory in what became the century's most celebrated scientific experiment. The result ushered in a new era and made Einstein a global celebrity by confirming his dramatic prediction that the path of light rays would be bent by gravity. Today, Einstein's theory is scientific fact. Yet the effort to "weigh light" by measuring the gravitational deflection of starlight during the May 29, 1919, solar eclipse has become clouded by myth and skepticism. Could Arthur Eddington and Frank Dyson have gotten the results they claimed? Did the pacifist Eddington falsify evidence to foster peace after a horrific war by validating the theory of a German antiwar campaigner? Learn how expedition scientists overcame war, bad weather, and equipment problems to make the experiment a triumphant success.



Daniel Kennefick received his Ph. D. in Physics from Caltech in 1997.

He recently authored "No Shadow of a Doubt: The 1919 Eclipse That Confirmed Einstein's Theory of Relativity". He previously authored a history of gravitational waves called "Traveling at the Speed of Thought" and co-authored the recently published "Einstein Encyclopedia."

His research concentrates in three areas- gravitational waves, galactic structure and history of physics.

