The Department of Physics and Astronomy presents

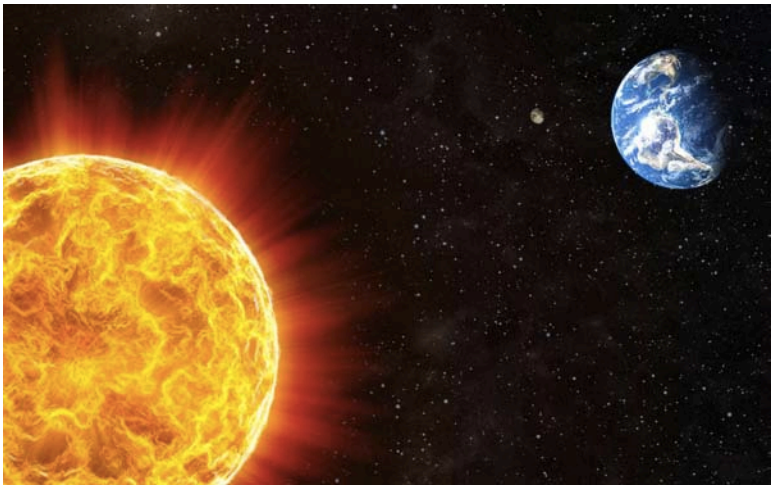
2016 William H. Nelson Lecture

"Cycles of the Sun: Our Variable Star and its Effects on Earth"

Dr. Jeff Hall, Director of Lowell Observatory

Tuesday, 19 April 2016, 3:30pm
25 Park Place, SB Room 12

Coffee and treats at the start, and reception to follow. Please join us!



Abstract: The seemingly steady light of our Sun varies on multiple timescales, often abruptly and violently. These variations affect Earth's immediate space environment as well as terrestrial climate. Understanding how and why our star changes is essential as the space around Earth becomes increasingly crowded with satellites and humans, and as the effects of climate change become ever more pronounced. A broad understanding of solar variability requires studying not only the Sun itself but its closest stellar siblings in our part of the Milky Way. A large observational effort to do this has been underway for sixty years, and it is a fascinating glimpse into not only the science of astronomy but into the advantages – and pitfalls – of very long-term scientific studies. In this lecture, I will review this interesting story, discuss the state of our knowledge, and offer some predictions (or at least wild guesses) about the coming years.

Jeffrey Hall has served as Director of Lowell Observatory in Flagstaff, AZ, since June 2010. He joined the staff at Lowell in 1992 as a postdoctoral research fellow. He received a B. A. in Physics in 1986 from Johns Hopkins and a Ph.D. in Astronomy and Astrophysics in 1991 from Penn State. His research at Lowell has focused on solar and stellar activity cycles, with the goal of lending an astronomical perspective to solar influences on terrestrial climate.

The William H. Nelson Physics & Astronomy Research Endowment was set up to honor the memory of Dr. William H. Nelson by the Nelson family. Dr. Nelson worked at Georgia State University from 1974 until his sudden death in 2010.

Dr. Nelson began as an assistant professor in 1971, became tenured in 1981, a full professor in 1988, and served as the acting chair of the Physics & Astronomy Department from 1992-1994. He became full chair in 1994. In 2004, Dr. Nelson became Associate Dean of Research for the College of Arts & Sciences. In 2009, he served as interim chair of the Math Department.