

PHYSICS AND ASTRONOMY COLLOQUIUM

James W. Van Dam, Ph.D.
U.S. Department of Energy

The U.S. Fusion Energy Sciences Program

Plasma, the so-called fourth state of matter, is pervasive throughout the universe, with many diverse scientific manifestations. The U.S. Department of Energy supports plasma science research ranging from low-temperature plasmas, high energy density plasmas, and warm dense matter, to solar, space, and astrophysical plasmas. A large research effort is also devoted to studying how high-temperature plasmas can be confined by magnetic fields in the laboratory-- ultimately for the production of fusion energy. The ITER experimental facility, to be operated as an international project by a consortium of international member countries representing more than 50% of the world's population, will push research into the frontier regime of "burning plasmas," which are self-heated and self-sustaining. This talk will explain what fusion is, describe how the U.S. fusion energy sciences program operates, and point to some career opportunities.



THURSDAY, JANUARY 21, 2016 | 4:00 PM | HAWKING AUDITORIUM



PHYSICS & ASTRONOMY
TEXAS A&M UNIVERSITY