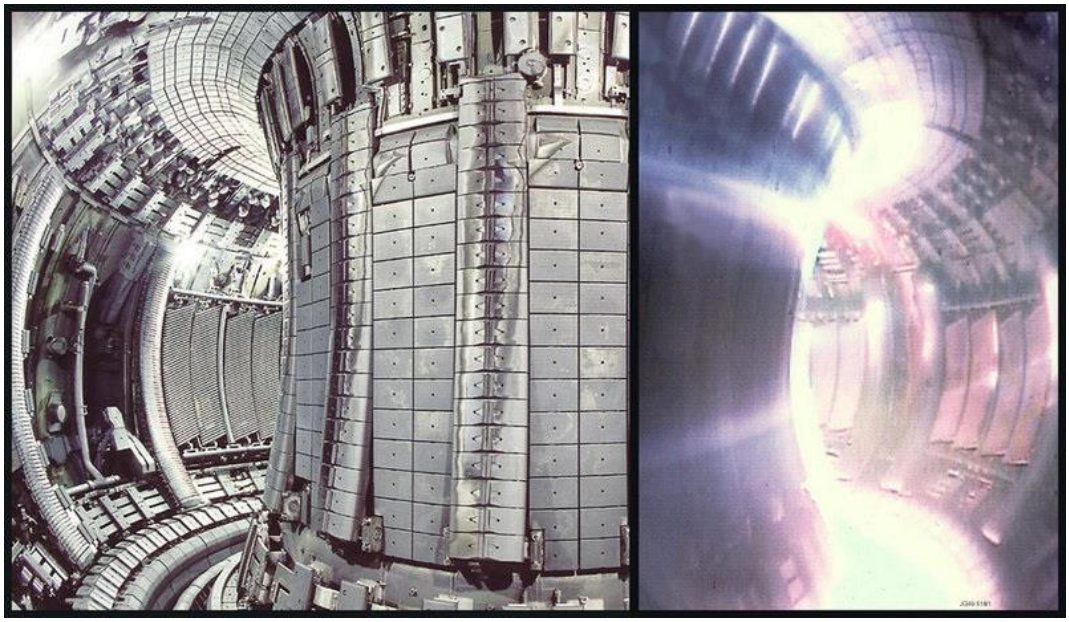
Colloquium



Dr. Jonathan Roveto Georgia Tech

Heat and Particle Transport in Tokamak Reactors

Abstract

Nuclear fusion as a power generation technology is seeing increased attention given the construction of ITER (the International Thermonuclear Experimental Reactor), which is scheduled to achieve first plasma in 2025. ITER will be the largest of the tokamak-class of fusion reactors ever built and aims to generate 500 MW of thermal power. This talk will give an overview of the design of tokamak reactors and discuss heat and particle transport in the "edge" plasma, a critical feature of high-performance tokamaks. This talk will also discuss challenges facing current and future reactor designs and methods of addressing those challenges. A discussion of work at the DIII-D reactor at General Atomics in San Diego, CA will also be included.

3:00 p.m. – 4:30 pm, Friday, March 25th,
In-Person: McLane 162