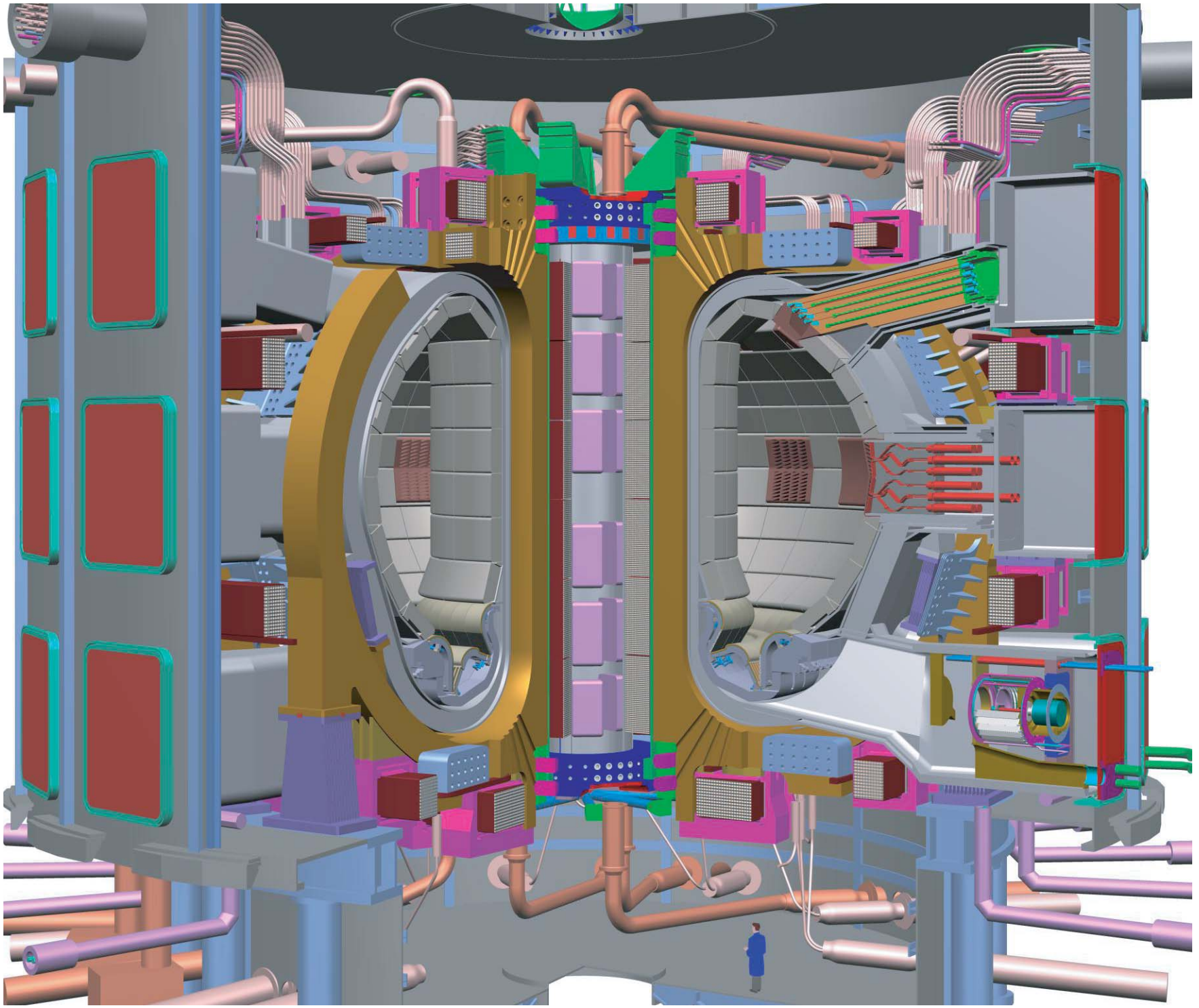


Boston University Physics Colloquium



The Path to Fusion Power

Fusion powers the sun and stars and is potentially an environmentally responsible and intrinsically safe source of limitless energy. The Joint European Torus (JET) has produced 16 MW of fusion power. Construction is about to begin on its successor, a prototype the size of power station called ITER (International Tokamak Experimental Reactor). It should produce at least 500 MW. Further work on fusion technologies is needed, including construction of an International Fusion Materials Irradiation Facility (IFMIF) which would verify that materials could stand up to years of intense neutron bombardment in a fusion power station. Fusion's potential attractions are limitless fuel and the absence of both green house gas and long-lived radioactive by-products. The economics suggest that the time has come to develop fusion as rapidly as reasonably possible. The status of fusion energy development will be described, along with the outstanding challenges, the remaining steps, and the timetable.

Sir Chris Llewellyn Smith

Director, Atomic Energy Agency, United Kingdom

February 14, 2008 (Thursday) at 4:30 pm

PRB 595, Physics Research Building, Boston University

Call: Winna Somers (wsomers@bu.edu) (617)353-9320