

Prof. Troy Carter University of California, Los Angeles Powering the Future: Fusion & Plasmas, the FESAC Long Range Planning Report

A long-range plan for DOE Fusion Energy Sciences has been created to accelerate the development of fusion energy and advance plasma science. This plan is based on substantial input from the research community, which conveyed a wealth of creative ideas and its passion to accelerate fusion energy development and advance plasma science over an intensive two-year process. The FESAC Long Range Planning Report provides a decadelong vision for the field of fusion energy and plasma science, presenting a path to a promising future of new scientific discoveries, industrial applications, and ultimately the delivery of fusion energy.

About the Speaker: Troy Carter is a Professor of Physics at the University of California, Los Angeles. Prof. Carter is the Director of the Basic Plasma Science Facility (BaPSF), a collaborative research facility for plasma science supported by DOE and NSF. He is also the Director of the Plasma Science at Technology Institute (PSTI) at UCLA. His research focuses on experimental studies of fundamental processes in magnetized plasmas and is motivated by current issues in magnetic confinement fusion energy research and in space and astrophysical plasmas including magnetic reconnection, turbulence and transport in magnetized plasmas, and the nonlinear physics of Alfvén waves. He was a co-recipient of the 2002 APS DPP Excellence in Plasma Physics Research Award and is a Fellow of the APS. Prof. Carter received BS degrees in Physics and Nuclear Engineering from North Carolina State University in 1995 and a PhD in Astrophysical Sciences from Princeton University in 2001.