The Center for Energy Science and Technology Advanced Research (CESTAR)

welcomes

Professor René Moreau Institut National Polytechnique de Grenoble, France

presenting:

"The fundamentals of MHD turbulence in the limit of small magnetic Reynolds number"

Abstract: The main characteristics of the influence of a high uniform DC magnetic field on turbulence are described, with an emphasis on the physical mechanisms. Three experiments, which were performed in Grenoble, will be evoked and the most recent one, the MATUR experiment, made under a magnetic field going up to 6 Tesla, will be described in more detail. In this experiment a shear flow instability feeds the turbulence, which reacts on the shear itself. The quasi-two-dimensional character of the turbulence results in an inverse energy cascade ending up in a small number of very large structures.

Thursday, June 24 • 4:00 PM 47-124 Engineering IV • Refreshments served

For more information: Please contact Neil Morley at x61230 or Karl Holmes at x61228