中央大學物理學系

Department of Physics, National Central University



## Colloquium

Development of Formosa Intergraded Research Spherical Tokamak (FIRST), the first Tokamak in Taiwan for fusion energy research

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## Date: 2024/01/09 (Tue) Venue: S4-625 Time: 14:00-16:00

Abstract:

Nuclear fusion energy has been treated as a holy grail of clean energy. It is the first time that the Taiwanese government has initiated a project directly related to the study of nuclear fusion energy. The joint project includes many research groups at the National Atomic Research Institute (Former Institute of Nuclear Energy Research), National Cheng Kung University, National Tsing Hua University, and National Center for High-performance Computing. In this project, we are building a spherical tokamak called the Formosa Intergraded Research Spherical Tokamak (FIRST). The device confines the hot plasma using a magnetic field, a scheme in the regime of magnetic confinement fusion (MCF). In this talk, the goal, the considerations, the challenges, and the progress of developing the system will be presented.