



## Colloquium

Department of Engineering and  
System Science,  
Institute of Nuclear Engineering  
and Science,  
National Tsing Hua University

### Inertial confinement fusion and High-energy-density plasma

**Po-Yu Chang, Associate Professor,  
Institute of Space and Plasma Sciences,  
National Cheng Kung University**

High-energy-density plasma is a regime where the pressure is greater than 1 Mbar. Two topics in this regime will be introduced. The first one is the recent breakthrough of “target gain” exceeding unity in inertial confinement fusion. Then, laboratory astrophysics using a pulsed-power system will be presented. In particular, studies of plasma disks generated from collisions of two counter-propagating plasma jets will be given.

**15:30-17:00 P.M., Wednesday, May 17<sup>th</sup>, 2023**

**NE69 ESS Building, NTHU**

**101, Sec2, Kaung-Fu Rd., Hsinchu 300044, Taiwan**

## Biography:



Po-Yu Chang received his Ph.D. degree in physics from the University of Rochester (U of R), Rochester, NY, USA in 2013. He was a postdoctoral associate at the Laboratory for Laser Energetics (LLE), U of R, from 2013 to 2016, focusing on Magneto-Inertial Fusion. In 2016, he joined ISAPS, NCKU. His research interests and expertise include pulsed-power systems, plasma diagnostics, high-energy-density plasma (HEDP), laboratory astrophysics and space science, inertial-confinement fusion (ICF), magneto-inertial fusion (MIF), and plasma propulsion.

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