



Contribution ID: **69**

Type: **poster**

Isolated Terawatt Attosecond X-ray Free Electron Laser

Monday 1 July 2019 18:15 (2 hours)

Micro-bunching instability (MBI) is considered as a critical obstacle for the realization of the isolated terawatt attosecond XFEL. To make high a peak current, the distribution of the electron beam in the phase space should be uniform. The micro-bunching instability will twist the distribution which results in very low peak current value. The effect by MBI has been investigated and a proposal is provided to overcome the obstacle. This will pave a way to the realization of a terwatt level, isolated attosecond pulse at X-ray region.

Authors: PARK, Yong Woon (Pohang Accelerator Laboratory); Dr SHIM, Chi Hyun (Pohang Accelerator Laboratory); Prof. KIM, Dong Eon (Pohang University of Science and Technology)

Presenter: PARK, Yong Woon (Pohang Accelerator Laboratory)

Session Classification: Poster session 1