

The Beams and Applications Seminar Series

RF breakdown and Surface Studies

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Bldg. 401, room B2100

Friday, April 22, 1:30 pm

Host: Kwang-Je Kim, ASD

Muon Cooling requires low frequency (201 MHz) rf cavities with high electric fields (10 – 20 MV/m), in an environment with high magnetic fields (2-5 T). The breakdown processes here are similar to those in high frequency cavities, but are more experimentally accessible. We are developing a model that seems consistent with the available data, and are developing an experimental program to check this model. We do rf experiments in the Muon Test Area of Fermilab and also with an Atom Probe Field Ion Microscope, a device which can operate in the same parameter range as field emitters in a cavity.

For more information visit

<http://www.aps.anl.gov/asd/physics/seminar.html>

Visitors from off-site please contact Yuelin Li
(ylli@aps.anl.gov, 630-252-7863) to arrange for a gate pass.

This ANL seminar series is a CARA activity and focuses on the physics, technology and applications of particle and photon beams. It is sponsored jointly by the ASD Division, the AWA group of the HEP Division, and the ATLAS group of the PHY Division.