

Mechanisms of Vacuum Arcs



27-30 June, 2011, Helsinki, Finland

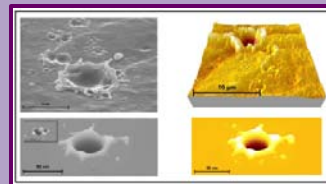
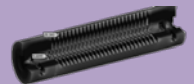
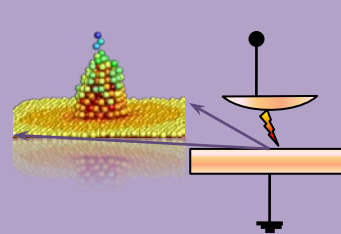
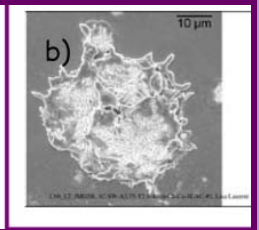
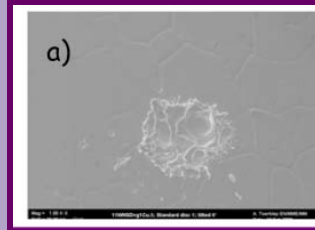


The previous *Breakdown Workshop* (CERN, 2010) has inspired a new series of workshops to combine the efforts of researchers in the different fields to understand the mechanisms underlying the highly intriguing phenomenon of electrical breakdown.

This workshop will cover *rf* and *dc* types of electrical breakdowns, both theoretically and experimentally.

Topics

1. **Experiments:** vacuum arcs, dc spark systems, rf accelerating structures, materials, diagnostics, techniques and technologies for high gradients, arcing in fusion devices.
2. **Theory and simulations:** Surface modification under electric and electromagnetic fields, dislocation activity, PIC plasma simulations, plasma-wall interactions, surface damage and other.
3. **Applications:** Particle accelerators, fusion devices, satellites and industrial.



Venue

The workshop will be held at the University of Helsinki near the harbor area. You will have a chance to experience the famous “white” nights which never turn fully dark!

Organizers:

Flyura Djurabekova, Kai Nordlund

HIP and Department of Physics,
University of Helsinki

Walter Wuensch, Sergio Calatroni

CERN



<http://beam.acclab.helsinki.fi/hip/mevarc11>