

## Photocathode Physics for Photoinjectors 2018



Contribution ID: 25

Type: **not specified**

### Spin polarized low energy electron microscopy: 3D vector-magnetometry and workfunction mapping

*Monday 15 October 2018 17:25 (20 minutes)*

Using spin-polarized electron beams in a low energy electron microscope provides opportunities to measure microscopic spin structures of domain walls and related spin textures, as SPLEEM permits imaging the vector orientation of the magnetization with high spatial- and angular resolution. This talk outlines key principles of relevant magnetic properties and opportunities in photocathode and electron source design. LEEM also provides interesting ways to image electronic properties such as workfunction with high spatial and energy resolution, which is useful for cathode research relevant to the P3 community.

**Presenter:** SCHMID, Andreas (Lawrence Berkeley National Lab)

**Session Classification:** Session 4

**Track Classification:** Session 4: Application Oriented Research: Spin Polarized Sources