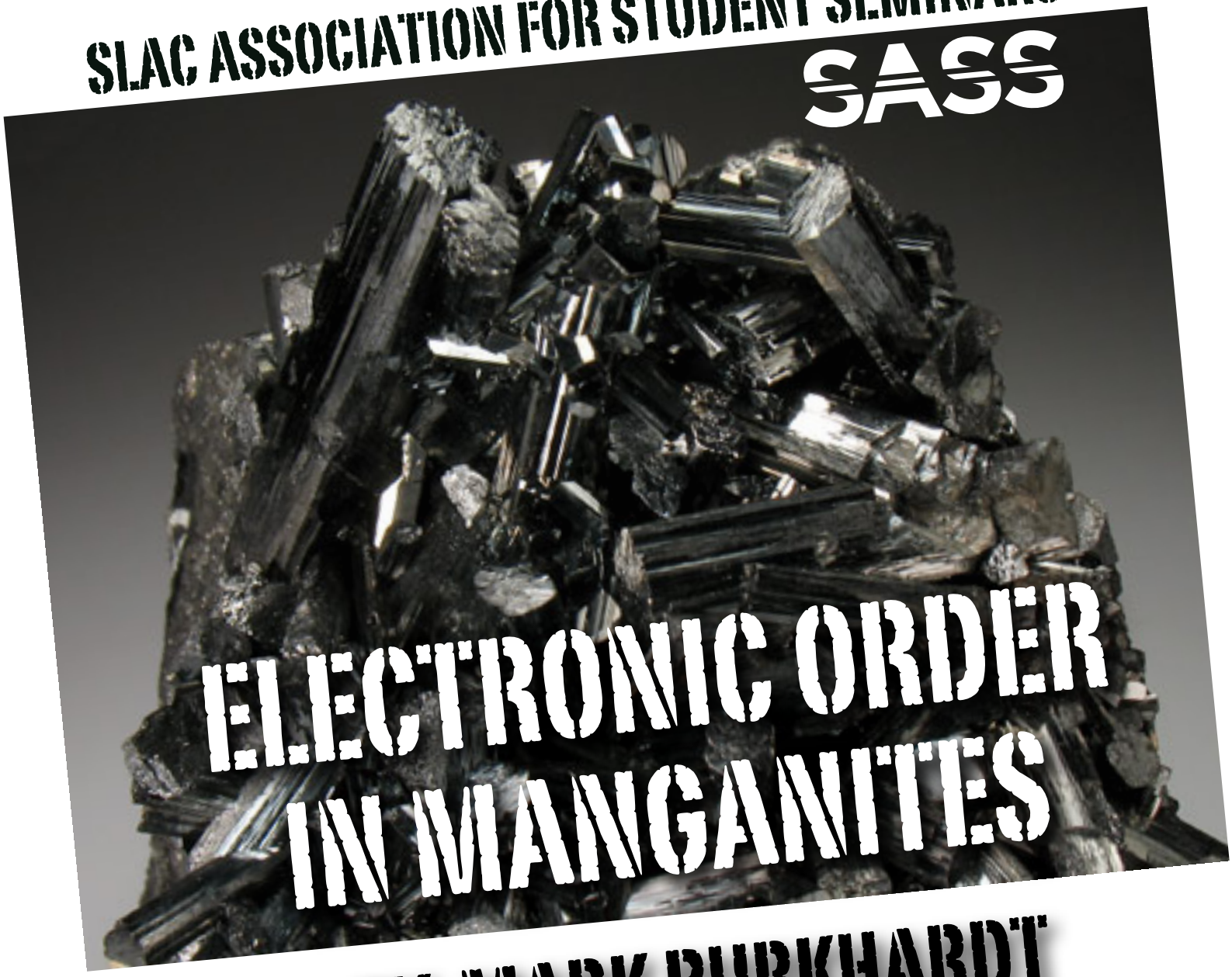
SLAC ASSOCIATION FOR STUDENT SEMINARS

SASS



ELECTRONIC ORDER IN MANGANITES

BY MARK BURKHARDT

Like many correlated electron systems, manganites exhibit unusual electronic properties. They are best known for colossal magnetoresistance: applying a magnetic field can result in an increase of conductivity of orders of magnitude. This effect occurs in part because multiple phases coexist within a uniform single-crystal sample. I will give an introduction to correlated electron systems and the physics of manganites, and discuss x-ray techniques that allow us to measure the individual coexisting ordered phases.

OCTOBER 12TH
AT 12:30 PM

MADRONE ROOM
REDWOOD BUILDING