

## W0083

**The SER-CAT Remote User Participation Program.** J.P. Rose, J. Chrzas, Z. Jin, J. Fait, V. Babson, B.C. Wang, SER-CAT, APS, Argonne National Laboratory and Dept. of Biochemistry and Molecular Biology, Univ. of Georgia, Athens, GA 30602.

Striving to meet the growing demands for timely access to its beamlines, the Southeast Regional Collaborative Access Team (SER-CAT, Sector 22 APS) has developed an innovative program for secure remote user data collection on its bending magnet beamline. This is important to the SER-CAT membership since most users are located hundreds of miles from the beamlines.

The system consists of a locally modified ALS-style crystal mounter, the SERGUI user interface and a secure Access Grid based communication link between the remote user and the beamline. The automounter allows for uninterrupted screening or data collection on up to 96 samples. The SERGUI user interface provides tab notebook style access to all beamline control and data collection functions, and to data reduction and analysis software. Since all data remains on SER-CAT computers the communications overhead is dramatically reduced.

The remote access system has been under alpha testing by researchers at the University of Georgia for the past 10 months with a planned release to the SER-CAT membership in mid 2006. The automounter coupled with the ability to initiate and/or supervise data collection remotely via SERGUI and Access Grid will enable SER-CAT to begin exploring the possibility of restructuring its current 24 hr minimum beam time allocation into smaller but more frequent 4, 6, or 8 hr shifts. This would give SER-CAT members better access to the facility and allow them to plan their experiments and beamline use more efficiently.