## **International Workshop on Accelerator Alignment 2010**



Contribution ID: 23 Type: not specified

## Hydrostatic Level Systems at Fermilab and DUSEL

Friday 17 September 2010 09:20 (20 minutes)

There are a variety of Hydrostatic Level Systems in use at Fermilab and the Deep Underground Science and Engineering Laboratory (DUSEL) at the Homestake gold mine in Lead South Dakota. Systems at Fermilab are used to measure motion of quadrupole magnets in the Tevatron and the low beta quadrupoles at the interaction regions. In addition there are deep HLS systems to study slow ground motion in preparation for future accelerators. Two types of HLS have been installed on the 2000 ft level at DUSEL to study the motion of the ground during the dewatering process. Data will be presented on slow ground motion, the ATL law as measured by these systems and data on the stability of the measurement systems themselves.

**Primary author:** Dr VOLK, James (Fermi National Accelerator Lab)

**Co-authors:** Dr CHUPYRA, Andrey (Budker Institute of Nuclear Physics); Prof. STETLER, Larry (South Dakota School of Mines and Technology); Dr KONDAUROV, Mikhail (Budker Institute of Nuclear Physics); Dr SINGATULIN, Shavkat (Budker Institute of Nuclear Physics); Dr SHILSTEV, Vladirmir (Fermilab)

Presenter: Dr VOLK, James (Fermi National Accelerator Lab)

Session Classification: D5, S1, Long Term Monitoring, Ground Motion, Vibration

Track Classification: ground motion, long term monitoring, vibration