

Abstract Submitted
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Collaborations in Underground Laboratories JOSEPH S.Y. WANG,
Lawrence Berkeley National Lab — There are programs between underground physics labs into other studies. The Gran Sasso with large halls and dedicated tunnels in Italy and the Canfranc with newly completed space in Spain have geodynamic experiments (A. Bettini communication, 2011). The Low Noise Underground Lab (LSBB of Rustrel-pays d’Apt) converted a former French missiles launching command center to house a SQUID shielded electromagnetically above 10 Hz for global ionosphere and earthquake observations (G. Waysand et al. 2010). The China JingPing Lab has new physics room and tunnels excavated under 2.5 km overburden with rock mechanic changes evaluated (X. Feng, 2011). These are examples associated with tunnels through mountain ranges. In North America, we have Canada’s SNO in an active mine with new space and the U.S. effort for reentry into the abandoned Homestake mine levels for physics and bio-geo-engineering studies. We also have underground research labs dedicated to nuclear waste research in Sweden, Switzerland, France, Germany, and candidate sites in Japan and China. All these underground labs are engaging in international collaborations to develop inter-disciplinary studies. The linkage/networking with International Physics is pursued.

Joseph S.Y. Wang
Lawrence Berkeley National Lab

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