

**LABORATORI NAZIONALI DEL GRAN SASSO**

**SEMINAR ANNOUNCEMENT**

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**“Sources of background and  
their suppression illustrated  
by experiments on neutrino  
properties at LNGS”**

**Abstract**

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Natural and cosmic ray induced radioactivity obscure the signal rates of solar neutrino and double beta experiments by many orders of magnitude. The challenge to suppress these background sources is reviewed on the example of germanium spectroscopy and some selected methods applied in the experiments: GALLEX/GNO, BOREXINO, HEIDELBERG-MOSCOW and GERDA. A short introduction reviews the pursuit of neutrino properties in the course of the above experiments. The potential of screening techniques based on germanium detectors and on proportional counting are highlighted.

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