

**LABORATORI NAZIONALI DEL GRAN SASSO**

**SEMINAR ANNOUNCEMENT**

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***Recent investigations on  
rare nuclear processes  
in the DAMA set-ups and  
LNGS Ge facility***

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*Recent results on several nuclear rare processes will be summarized; they have been obtained with the help of the low background DAMA set-ups and of the LNGS Ge facility, where also DAMA/Ge is installed. Emphasis will be given to the continuous efforts to develop and use radiopure/enriched samples/detectors. In this seminar there will be presented a new observation of the  $2\beta 2\nu$  decay of  $^{100}\text{Mo}$  to the  $0_1^+$  level of  $^{100}\text{Ru}$ , the first observation of some rare alpha decays in  $^{190}\text{Pt}$  and in  $^{151}\text{Eu}$ , and the limits obtained on several other rare processes. In particular, there will be outlined the developments, the results and the perspectives of the measurements performed by using  $\text{CdWO}_4$  scintillators, enriched either in  $^{106}\text{Cd}$  or in  $^{116}\text{Cd}$ . Finally, works in progress and some perspectives will be introduced.*

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**MARCH 27, 2013 – 2:30 PM**  
**LNGS - “B. PONTECORVO” ROOM**