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## **[342] The upgraded low-background germanium counting facility Gator for high-sensitivity $\gamma$ -ray spectrometry**

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The Astroparticle Physics Group at the University of Zurich operates a high-purity germanium (HPGe) spectrometer (Gator) in a low-background environment underground at the Laboratori Nazionali del Gran Sasso (LNGS) in Italy. The 2.2 kg  $\gamma$ -ray spectrometer is one of the world's most sensitive HPGe detectors with an integrated count rate of  $(86.2 \pm 0.7)$  events/(day kg) in the energy region 100-2700 keV. It is used to screen and select materials for rare-event search experiments such as XENON, DARWIN, GERDA and LEGEND. We describe the general facility, the recent upgrades and their impact on the background level. We also demonstrate its sensitivity by presenting the results for several material samples.

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