

## **STATUS OF THE AMORE EXPERIMENT SEARCHING FOR NEUTRINOLESS DOUBLE BETA DECAY OF $^{100}\text{MO}$**

Hyon-Suk Jo<sup>1</sup>, on behalf of the AMoRE Collaboration

<sup>1</sup> Institute for Basic Science, Center for Underground Physics (South Korea)

The goal of the Advanced Mo-based Rare process Experiment (AMoRE) is to search for neutrinoless double beta decay of  $^{100}\text{Mo}$  using low-temperature detectors consisting of Mo-based scintillating crystals read out via metallic magnetic calorimeters. Simultaneous measurements of heat and light signals are performed at mK temperatures, which are reached using a dilution refrigerator. A pilot experiment, named AMoRE-Pilot, using five  $^{100}\text{Mo}$ -enriched,  $^{48}\text{Ca}$ -depleted  $^{40}\text{Ca}^{100}\text{MoO}_4$  crystals with a total mass of about 1.5 kg, has been running in the 700-m-deep Yangyang underground Laboratory as the first stage of the AMoRE project. The current status of the AMoRE experiment, as well as the plans for the next, higher-scale, experimental stages, will be presented.