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Status of the HOLMES detector development

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HOLMES is a new experiment to directly measure the neutrino mass with a sensitivity as low as 0.4 eV. HOLMES will perform a calorimetric measurement of the energy released in the electron capture decay of ¹⁶³Ho (A. De Rujula and M. Lusignoli, Phys. Lett. B 118 (1982) 429). The calorimetric measurement eliminates systematic uncertainties arising from the use of external beta sources, as in experiments with beta spectrometers. **HOLMES** will deploy a large array of low temperature microcalorimeters with implanted ¹⁶³Ho nuclei. We outline here the project technical challenges and the present status of the development.

