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## Latest results from the CUORE experiment

The Cryogenic Underground Observatory for Rare Events (CUORE) is the first bolometric experiment searching for  $0\nu\beta\beta$  decay that has successfully reached the one-tonne mass scale. The detector, located at the LNGS in Italy, consists of an array of 988 TeO<sub>2</sub> crystals arranged in a compact cylindrical structure of 19 towers. CUORE has been collecting data continuously at ~10 mK since 2017, achieving a 90% uptime and amassing over 2.5 tonne-years of TeO<sub>2</sub> exposure. In March 2024 the collaboration released the most recent result of the search for  $0\nu\beta\beta$ , corresponding to two tonne-year TeO<sub>2</sub> exposure. This is the largest amount of data ever acquired with a solid state cryogenic detector, which allows for further improvement in the CUORE sensitivity. In this talk, we will present the current status of the CUORE search for  $0\nu\beta\beta$  with the updated statistics of two tonne yr exposure and further updated results including the CUORE background model, enabling a precision measurement of the <sup>130</sup>Te  $2\nu\beta\beta$  decay half-life.

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