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CUORICINO results for two-neutrino double beta decay and rare decays to excited states

CUORE is a bolometric experiment currently under construction at the Laboratori Nazionali del Gran Sasso, Italy.

Its main purpose is the search for neutrinoless double beta decay of Te-130.

Thanks to its big mass, excellent energy resolution and very low background, it also offers the possibility to investigate other rare processes with unprecedented sensitivity.

 $CUORE\ comes\ after\ CUORICINO,\ a\ pilot\ experiment\ that\ took\ data\ at\ the\ Laboratori\ Nazionali\ del\ Gran\ Sasso\ in\ the\ years\ 2003-2008.$

The poster will present the analysis of several double beta decay modes of Te-130 other than the neutrinoless mode on the ground state, carried out on the Cuoricino data.

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