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A measurement and modeling of the complex impedance of the Transition Edge Sensor for the Ricochet experiment

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Coherent elastic neutrino-nucleon scattering (CEvNS) offers a new avenue in searching for physics beyond the Standard Model. The Ricochet neutrino experiment aims to detect CEvNS at the Institut Laue–Langevin (ILL) nuclear reactor. One of the two cryogenic detector arrays employs a modular TES (Transition Edge Sensor) based readout strategy. This poster will introduce the latest measurement and modeling of the complex impedance of TES modules at the Argonne National Laboratory and silicon-based detectors operated at University of Massachusetts Amherst.

Primary author: Mr CHEN, Ran (Northwestern University)

Co-authors: SCHMIDT, Benjamin (Northwestern University); Mr VEIHMEYER, Charlie (University of Massachusetts Amherst); CHANG, Clarence (Argonne National Laboratory); PINCKNEY, Doug (University of Massachusetts Amherst); FIGUEROA-FELICIANO, Enectali (Northwestern University); WANG, Gensheng (Argonne National Laboratory); Ms BRATRUD, Grace (Northwestern University); ZHANG, Jianjie (Argonne National Laboratory); Mr KENNARD, Kyle (Northwestern University); Ms MATEO, Lidabel (Northwestern University); CHAPLINSKY, Luke (Member@umass.edu); LISOVENKO, Marharyta (Argonne National Laboratory); HERTEL, Scott (University of Massachusetts Amherst); Dr NOVATI, Valentina (Northwestern University); YEFREMENKO, Volodymyr (Argonne National Laboratory); HONG, Ziqing (University of Toronto)

Presenter: Mr CHEN, Ran (Northwestern University)

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