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Cosmogenically Activated Backgrounds of the COSINE-100 Experiment ESTELLA BARBOSA DE SOUZA, Yale Univ — The COSINE-100 experiment is a NaI(Tl) dark matter direct detection experiment, with the goal of testing DAMAs claim of dark matter detection by looking for an annual modulation signal. It has 8 NaI(Tl) crystals, adding to a total of 106 kg, and 2000 liters of a liquid scintillator veto. Located at the Yangyang Underground Laboratory, South Korea, COSINE-100 has been running since September 2016. The search for the annual modulation signal requires a complete understanding of the background signal and its time dependence. This can be achieved by conducting a complete simulation and modeling of the detectors background, in addition to the investigation of the cosmogenic activation history of the crystals. In this talk, I will present the study of the COSINE-100 cosmogenically activated backgrounds.

Estella Barbosa de Souza
Yale University

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