

# Muon and muon-induced phosphorescence events in the COSINE-100 Dark Matter Searches

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The COSINE experiment has been taking physics data which aim to confirm or refute the annual modulation signal reported by DAMA/LIBRA by using the same technique. In order to tag and suppress cosmic-ray muons, a muon detector was constructed using plastic scintillator panels that completely surround the crystal detector array. High energy muons in the NaI(Tl) crystals and low energy scintillation signals corresponding to muon-induced phosphorescence events with half-lives longer than a few seconds were observed. The muon flux and a study of muon-induced phosphorescence events in the COSINE-100 experiment will be presented.

**Primary author:** PRIHTIADI, Hafizh (Bandung Institute of Technology)

**Presenter:** PRIHTIADI, Hafizh (Bandung Institute of Technology)

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