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## **Reina Maruyama (Yale U.): COSINE-100**

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Astrophysical observations give overwhelming evidence for the existence of dark matter. While the DAMA collaboration asserts that they observe a dark matter-induced annual modulation signal in their NaI(Tl)-based detectors, their signal has not been confirmed. DAMA's observations are inconsistent with those from other direct detection dark matter experiments under most assumptions of dark matter. COSINE-100 has been taking physics data since September 2016 at Yangyang Underground Laboratory. I will describe the COSINE-100 experiment, the current status and prospect for low-background NaI(Tl)-based dark matter experiments, and our strategy for resolving the current stalemate in the field.

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