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The Daya Bay Experiment I: Introduction and Overview JIM NAPOLITANO, Rensselaer Polytechnic Institute, DAYA BAY COLLABORATION — The Daya Bay Reactor Neutrino Experiment aims to precisely measure θ_{13}, the least well known mixing angle in the PMNS matrix. Our design sensitivity is 0.01 in $\sin^2(2\theta_{13})$, based on comparing the relative flux of antineutrinos from the reactor cores with "identical" antineutrino detectors at near and far distances. The detectors are immersed in water pools that provide active and passive shielding against backgrounds. This talk will introduce the importance of measuring θ_{13}, give an overview of our experimental arrangement, and outline our strategies for near and long term data taking. Details are given in subsequent presentations in this session.

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