

## Towards a Precise Determination of the Reactor Antineutrino Flux at Daya Bay

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In recent years, a discrepancy between the measured and the predicted antineutrino flux at nuclear reactors, the so-called “Reactor Antineutrino Anomaly”(RAA), has emerged. This implies either a bias in the theoretical calculation of the flux, or neutrino oscillation beyond the three-neutrino paradigm. A more precise determination of the antineutrino flux can shed light onto the origin of the RAA. Utilizing the powerful reactors as antineutrino sources, and eight functionally identical underground detectors, the Daya Bay Reactor Neutrino Experiment has collected more than 2.5 million inverse beta decay events. An elaborate neutron calibration campaign was performed at Daya Bay in order to improve the precision of the antineutrino detection efficiency. This poster will present the status of the related analysis as well as its potential to address the RAA problem.

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**Session Classification:** The “intensity frontier”: high intensity experiments, rare processes and precision tests