LABORATORI NAZIONALI DEL GRAN SASSO

SEMINAR ANNOUNCEMENT

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Measurement of Neutrino Mixing Parameter Sin²2θ₁₃ at Daya Bay

Neutrino oscillations and neutrino mass are the first, and only, known physics beyond the standard model. In the standard three neutrino model, neutrino oscillations, or mixing, is governed by 2 independent Δm^2 scales, three mixing angles and one CP violating phase. Until very recently, only the last mixing angle, θ_{13} , and the CPV phase, were still unknown. This talk will describe the first observation of non-zero $\sin^2 2\theta_{13}$ by the reactor neutrino experiment Daya Bay, and place this measurement in a global context.

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