

Double Chooz calibration

The current best limit on the neutrino mixing angle theta-13 ($\sin^2(2\theta_{13}) < \sim 0.15$ @90% C.L.) was established by Chooz experiment conducted in the French Ardennes over a decade ago. Another experiment, the Double Chooz, is being prepared at the same site and is aiming to surpass the current limit by almost an order of magnitude. Extensive calibration program is necessary to achieve claimed sensitivity. Described in this poster are dedicated embedded and deployable calibration systems developed for the Double Chooz experiment.

Overview of the experiment, design of available calibration tools, as well as expected performance, are presented.

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