

## Latest results from Double Chooz

Latest Results from Double Chooz experiment

Double Chooz (DC) is a reactor neutrino experiment aimed to precise measurements of the neutrino oscillation parameter  $\theta_{13}$ . The latest measured DC value for the  $\theta_{13}$  is  $\sin^2(\theta_{13}) = 0.102 \pm 0.011(\text{syst.}) \pm 0.04(\text{stat.})$  [1]. The experiment has completed data-taking. During the decommissioning of the detectors the mass measurements has been taken again for one of the detectors volume, the Gamma-Catcher. The final analysis is in progress and it is expected that the total uncertainty  $\sin^2(\theta_{13})$  will reduce from 0.012 to 0.0105 [1]. The overall status and the final detection systematics is presented including the new proton number.

[1] Thiago Bezerra; New Results from the Double Chooz Experiment; The XXIX International Conference on Neutrino Physics and Astrophysics (2020).

### Section

Neutrino physics and nuclear astrophysics

**Primary author:** ORALBAEV, Aldiyar

**Presenter:** ORALBAEV, Aldiyar

**Session Classification:** Poster session