

Testing DAMA/LIBRA signal: ANAIS-112 two years result

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ANAIS (annual modulation with NaI Scintillators) is a dark matter direct detection experiment located at the Canfranc Underground Laboratory (LSC, Spain).

Its main goal is to test in a model independent way the DAMA/LIBRA

positive result: an annual modulation in the low-energy detection rate compatible with the expected signal induced by WIMPs in the galactic halo.

ANAIS-112, consisting of 112.5 kg of NaI(Tl) scintillators,

was installed at the LSC in August 2017. In this talk I will present the performance of the detector and preliminary results corresponding

to 2 years of data. These results are compatible with the absence of modulation

and in some tension with DAMA/LIBRA result. Moreover, they support our goal of reaching a 3σ sensitivity to the DAMA/LIBRA result with about 5 years of data.

Authors: Ms ORTIZ, Alfonso (University of Zaragoza); Dr SALINAS, Ana (University of Zaragoza); Mr CINTAS, David (University of Zaragoza); Dr GARCIA, Eduardo (University of Zaragoza); Mr COARASA, Ivan (University of Zaragoza); Dr PUIMEDON, Jorge (University of Zaragoza); Dr AMARE, Julio (University of Zaragoza); Dr OLIVAN, Miguel Angel (University of Zaragoza); Dr VILLAR, Patricia (University of Zaragoza); Dr CEBRIAN, Susana (University of Zaragoza); Dr ORTIGOZA, Ysrael (University of Zaragoza)

Presenter: MARTINEZ, Maria (Universidad de Zaragoza)

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