

Dark Matter searches in Europe

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ABSTRACT

The review will cover Dark Matter search experiments led in Europe with a major European component. The current running experiments are DAMA/LIBRA and CRESST at LNGS, Edelweiss at LSM, Zeplin at Boulby, SIMPLE at LSBB. New limits provided recently by Edelweiss, Zeplin, SIMPLE will be reported. DAMA/LIBRA and CRESST claim, for the first, an established annual modulation of rate pointing to a Dark Matter signal, and for the second, an unexplained excess of events compatible with a low mass WIMP. Combined with a possible observation of a signal also at low mass by CoGeNT in US, all these observations recently gave rise to considerable activity on the arXiv preprint server. A tentative comprehensive summary of the situation will be given. R&D projects on scintillating bolometers by ROSEBUD and directional detectors by DRIFT and MiMac will be summarised. Lastly, the status of the EURECA project involving a sensitive mass from 100's of kg to one ton will be reviewed.