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## Indirect search for dark matter towards the centre of the earth with the ANTARES neutrino telescope

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The ANTARES neutrino telescope is a water Cherenkov detector and currently the largest operating neutrino telescope in the Northern Hemisphere. One of the main scientific goals of ANTARES is the indirect search for dark matter, as the Weakly Interacting Massive Particle (WIMP). WIMPs could scatter on normal matter and therefore be gravitational bound in massive astronomical objects like the Earth. Therefore an indirect search for dark matter can be performed by looking for an excess of the neutrino flux from the Earth's core. The exact spectrum of the neutrino flux from the Earth would depend on the WIMP mass, the annihilation channel, the spin independent scattering cross section and the thermally averaged annihilation cross section of the WIMPs. Such a search has been done with the data taken by ANTARES from 2007 to 2012. First limits from this search will be presented.

### Collaboration

ANTARES

### Registration number following "ICRC2015-I"

258

**Primary author:** GLEIXNER, Andreas (Friedrich-Alexander-Universitaet Erlangen/ECAP)**Co-author:** TÖNNIS, Christoph (Universitat de Valencia)**Presenter:** TÖNNIS, Christoph (Universitat de Valencia)**Session Classification:** Poster 3 DM and NU**Track Classification:** NU-EX