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# Particle physics in ice with IceCube DeepCore

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The IceCube Neutrino Observatory is the world's largest high energy neutrino telescope, using the Antarctic ice cap as a Cherenkov detector medium. DeepCore, the low energy extension to IceCube, is an infill array with a fiducial volume of around 30 MTon in the deepest, clearest ice, aiming for an energy threshold as low as 10 GeV and extending IceCube's sensitivity to indirect dark matter searches and atmospheric neutrino oscillation physics, as well as astrophysical neutrino sources in the southern sky. We will discuss the analysis of the first year of DeepCore data, as well as ideas for a further extension of the particle physics program in the ice with a future PINGU detector.

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