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## Seeing the high energy universe (with neutrinos)

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The detection of high energy neutrinos of extraterrestrial origin by the IceCube detector buried in the Antarctic icecap has opened a new window in astronomy. Efforts are underway in the KM3NeT project to construct a similar detector in the Mediterranean sea, so we will have a view of the full sky. We can then identify whether e.g. active galactic nuclei or gamma-ray bursts or something even more exotic are the sources of the highest energy particles in the universe. These experiments also measure to high precision the oscillations of neutrinos produced by cosmic ray interactions in the atmosphere, and can detect subtle matter effects as they pass through the Earth. Searches are also being carried out for neutrinos from the annihilation of dark matter accreted by the Sun or clustered in the Galactic halo, for neutrino pulses from core-collapse supernovae, etc.. I will describe this exciting physics programme.

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