

NGC 1068 as a neutrino source and the emerging class of Seyfert galaxies

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While the existence of a diffuse flux of high-energy astrophysical neutrinos has been established for over a decade, the sources of this signal still need to be discovered. Last year, the IceCube Collaboration reported evidence for TeV neutrinos from the nearby active galaxy NGC 1068 at 4.2 sigma. After the blazar TXS 0506+056, NGC 1068 is the second extragalactic neutrino source identified. It belongs to the class of the Seyfert galaxies, and it is intrinsically bright in X-rays. Follow-up analyses looking for neutrino emission from other X-ray luminous AGN in general and Seyferts in particular hint at the possibility that other Seyfert galaxies might have similar properties to NGC 1068 and be the next promising candidates as cosmic neutrino sources.

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