

# Dissecting the region around IceCube-170922A

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## Abstract content

On September 22, 2017, the IceCube Neutrino Observatory has observed for the first time ever an extremely high-energy neutrino IceCube-170922 spatially and temporally consistent with a gamma-ray flaring blazar, TXS 0506+056. The region around the event is, however, crowded with several other thermal and non-thermal sources. In order to get a clear picture of the possible neutrino counterparts we have performed a detailed multi-wavelength study of the region including all publicly available astronomical data. As a first step we use radio and x-ray data in order to identify the most interesting non-thermal counterpart candidates. Following we study the behaviour in time and energy for these sources with a special focus on archival Fermi-Lat gamma-ray data. In this talk we present the result of this *dissection* and discuss a possible gamma-ray to neutrino connection for the source candidates.

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