

# **Possible sources of cosmic rays in the galaxy**

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Abstract.

Cosmic rays are radiation of energetic particles originating outside the Earth. Galactic cosmic rays (GCRs) originate from outside the solar system but generally from within the Milky Way galaxy. They are mainly composed of 90% hydrogen (protons), about 9% helium (alpha particles) and all the rest of the elements make up only 1%. The origin of cosmic rays has for long remained a mystery. There is a suggestion that most galactic cosmic rays are probably accelerated in the blast waves of supernova remnants but it has been observed that some cosmic rays have much higher energies than supernova remnants can generate. So the question is, where are these ultra-high-energy cosmic rays coming from? These ultra-high-energy cosmic rays scientist suggests may perhaps be coming from outside the galaxy, from active galactic nuclei, quasars and gamma ray bursts.