

Thursday 14 December, 3:00 p.m. Nijenborgh 4, Lecture Hall 5111.0080

Multimessenger astronomy with high-energy neutrinos and gamma-rays

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For more than a decade, multi-messenger astrophysics has provided new insights into the properties and processes of the most energetic events in the Universe.

This field harnesses the potential of combined analyses of multiple and complementary information sources: electromagnetic waves (or photons) ranging from radio waves to gamma-rays, neutrinos, and gravitational waves.

In this presentation, I will focus on two key messengers: neutrinos and gamma-rays. I will review recent progress in multi-messenger astronomy using IceCube neutrino data, with a particular emphasis on the cores of Active Galactic Nuclei (AGNs).

Additionally, I will report on multiwavelength target-of-opportunity observations of the blazar PKS 0735+178 conducted by HESS and VERITAS.

Join us for coffee starting 3:30 p.m. Refreshments will be served after the lecture. For more information contact the host: Manuela Vecchi (<u>m.vecchi@rug.nl</u>) Website: <u>http://www.rug.nl/research/vsi/colloquia/</u>