

The Crab Nebula with the LOFAR Long Baselines

Thursday, 9 May 2024 09:00 (25 minutes)

The Crab Nebula, the pulsar wind nebula surrounding the Crab pulsar, is one of the most thoroughly studied objects in the sky. In this talk, I will present a subarcsecond resolution image of the nebula at 150 MHz, which is possibly the highest dynamic range image ever made with LOFAR. The new observations allow us to measure the expansion of the pulsar wind nebula, which resulted from a supernova explosion in 1054. Our map further shows new absorption features that can shed light on the magnetic field properties of the nebula.

keywords

ILT, Milky Way, supernova remnants, pulsar wind nebulae

In-person or online?

in-person

Career level

ECR

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