

## TRANSIENT SKY

## Closing in on the action

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Fast radio bursts have puzzled the astronomical community since their discovery in 2007. Following the first localization of such a burst in a nearby dwarf galaxy, Benito Marcote and collaborators used very high resolution radio observations to look at the radio emission location and properties of this object at scales of a few parsecs.

The authors used the European Very Long Baseline Interferometry Network together with the Arecibo telescope in Puerto Rico to disentangle the transient from the persistent radio emission in the core of the dwarf galaxy, finding that the two are collocated to within 40 parsecs. Given the compactness and location of the persistent radio source, the authors argue that the fast radio burst is physically linked to it.

Based on its repeating nature, the fast radio burst must come from either an active galactic nucleus powered by a weakly accreting supermassive black hole, or a young neutron star lighting up a supernova remnant. Further investigation is needed in order to understand whether these scenarios can be generalized to the larger sample of non-repeating fast radio bursts.

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