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Deciphering the puzzle of GRB170817 and the SKA studies of Gamma Ray Bursts - 20'

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Radio observations of the first gravitational wave event with an electromagnetic counterpart (GRB170817) has shown unexpected features. The long lived, slowly rising, non-thermal radio emission (together with optical and X-ray observations), between 10 and 200 days after the BNS merger, is consistent with being produced by either a narrowly collimated or an isotropic outflow with geometrical and/or dynamical structure. Global-VLBI observations, owing to the exquisite angular resolution, hold the key to distinguish between these two models answering the question whether a relativistic jet emerged from the merger. Implications for the event rate and jet physics will be discussed.

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