

The radio view of Gravitational waves counterparts: GW/GRB170817

G. Ghirlanda

Radio observations of the electromagnetic emission of gravitational wave events has proved unique to detect the faint slowly evolving signal. Radio detections distributed between 10 and 150 days after the BNS merger have shown that flux rises slowly with time. This evidence could be consistent with either a jet, seen off-axis, whose energy and bulk velocity decrease going off-axis or by a mildly relativistic nearly isotropic fireball (a cocoon). The latter could be still produced by a jet which has deposited much of its energy into the BNS ejecta. While it is hard to disentangle between these two scenarios based only on the source luminosity evolution, high resolution radio imaging (obtained within a global-VLBI project) hold the key to discuss solve the puzzle.