AS SKA / LOFAR

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Fast Radio Bursts: a brief review

Fast Radio Burst (FRB) is a recently identified phenomenon involving bright bursts in radio waves that have travelled from extragalactic distances. In the last few years, the FRB field has made tremendous progress. The total number of published FRBs has exceeded 600 of which at least 26 have been localised to a host galaxy, with examples from both younger and older stellar populations. Several dozen FRBs have been seen to repeatedly burst, and chromatic periodic activity cycles have been identified in a few sources. FRBs have been detected by at least 12 radio telescopes, where emission has been seen from as low as 110MHz to as high as 8GHz. While the nature of FRBs is still an open question, interesting constraints are emerging from these observational clues. In this talk, I will review the major FRB results and summarise FRB related research in France.