

The detection of the new RRAT pulsar J2225+35

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We report the detection of the new RRAT (Rotating Radio Transient) pulsar J2225+35, characterized by a burst-like periodic pulse radio emission and long silence for most of the time between.

The emission was detected only in 2 observation sessions of about 10 minutes long among 45 sessions with the total duration of about 3 hours. Pulses possess a frequency-time delay corresponding to a dispersion measure $DM = 51.8 \text{ pc cm}^{-3}$, a distance to the pulsar of $d = 3.05 \text{ pc}$ and periodicity $P = 0.94 \text{ s}$. Pulse scatter broadening $\tau_{sc} = 7 \text{ ms}$ corresponds to the same distance.

The emission is polarized. The rotation measure is $RM = 49.8 \text{ rad m}^{-2}$. Bursts of emission are observed as groups of individual outburst pulses.

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