

ABSTRACT ONLY

FIRST RESULTS OF THE GLITCHING
PULSARS MONITORING PROGRAM AT THE
ARGENTINE INSTITUTE OF
RADIOASTRONOMY

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Although pulsars exhibit a particularly stable rotation, this stability can be affected by glitches. This phenomenon consists of a sudden increase in the rotation frequency of pulsars. Its cause is not well understood, but it is likely related to the behavior of matter inside neutron stars. Therefore, glitches can provide constraints on the equation of state of neutron stars. With the aim of thoroughly characterizing these glitches, since 2019 we have been conducting a high-cadence monitoring campaign of glitching pulsars from the Argentine Institute of Radio astronomy (IAR). Up to date, we have detected and characterized two giant glitches in the Vela pulsar, one in PSR J0742–2822, one in PSR J1740–3015, and two mini glitches in PSR J1048–5832. We fully describe them in this poster presentation.

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