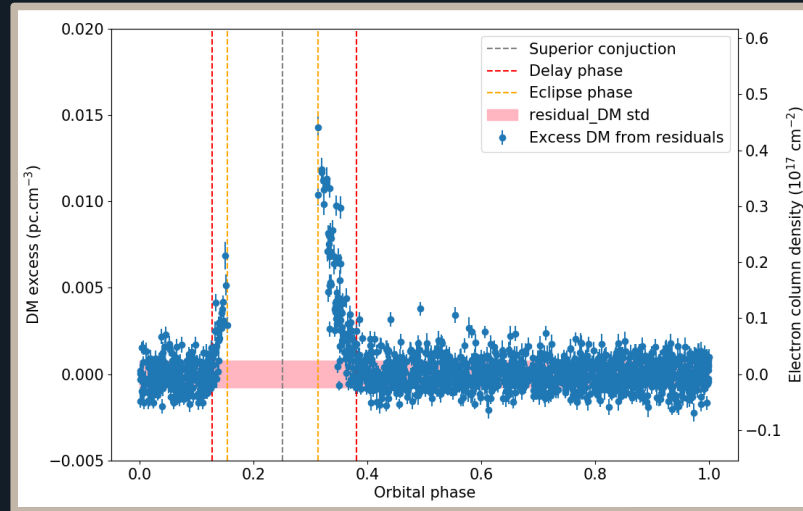


Spider binaries with the Nançay Radio Telescope

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Pair of pulsar + non degenerate companion :

- $P_{\text{spin}} < 20 \text{ ms}$
- $10^{-4} < M_c < 0.5 M_{\text{sun}}$
- $P_{\text{orb}} < 2 \text{ days}$



Eclipse of J2055+3829

19 spiders observed with the NRT :

→ since 2004
→ about 1 obs every ~1.3 days,
typically 1h long

The NRT sample enables us to
study group properties !

Why are spiders interesting ?

- Timing for PTAs
- Evolution process of millisecond pulsars
- Wind interaction & high energy emission
- Neutron star properties
- Eclipse phenomenology :
 - Process
 - Conditions to see them
 - Shared characteristics
 - Link with orbital stability