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# Probing the deconfinement phase transition in hybrid stars with the fastest-spinning millisecond pulsars

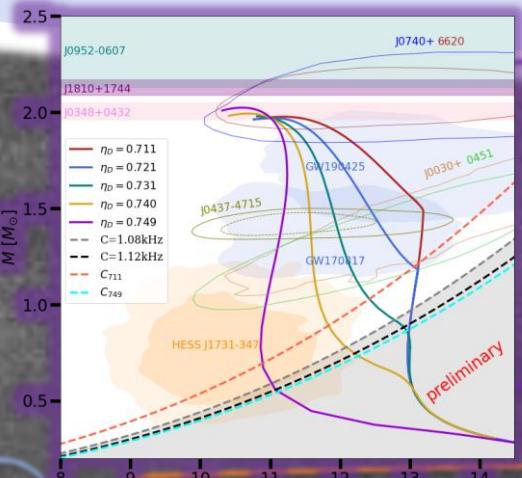
**ABPR-like parametrization**

## Hybrid neutron stars:

- First order phase transition
- Hadronic: DD2npY-T
- Quark matter:
  - RDF approach (Blaschke, Ivanytskyi)

## Uniformly rotating hybrid stars

- Tool: RNS code
- rotations up to Kepler frequency



## Diagram of rotational frequency

- millisecond pulsar measurements
- constraints on parameter space

## Universal relation

- constraints from Kepler frequency
- see impact from hybrid EoS

