

# Emulating neutron stars with ultracold atoms

**Massimo Mannarelli<sup>a</sup>**

<sup>a</sup> INFN, Laboratori Nazionali del Gran Sasso, I-67100 Assergi, Italy

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## **Abstract**

Neutron stars are extremely dense objects resulting from the core collapse of massive progenitor stars. We show that some phases realized in their interior can be simulated using table-top experiments with ultracold atoms. In particular, their rotation anomalies are analyzed and linked to possible supersolid phases recently discovered using trapped ultracold atoms.