## Continuous gravitational waves and neutron stars



Monday, 17 June 2024 - Thursday, 20 June 2024 Hannover, Germany

### **Scientific Programme**

#### Search methods

Descriptions of algorithms / data analysis methods to search for continuous gravitational waves and/or electro-magnectic or astroparticles emission from neutron stars, including machine learning methods.

Tools for parameter estimation.

Detector characterization studies related to CWs.

#### Search results

Results of searches for continuous gravitational waves.

Results of searches for electromagnetic radiation / astroparticles from neutron stars with multimessenger applicability.

# Neutron star modelling / Continuous gravitational-wave emission / Galactic population of neutron stars

Modelling neutron stars: rotational evolution, equation of state, quadrupole deformations, evolution of neutron stars in binary systems.

Sources and emission models of continuous gravitational waves, including exotic sources such as boson clouds around black holes.

Population synthesis of galactic neutron stars and detectability prospects of continuous gravitational waves.