

## Symposium Neutron stars (SYNS)

jointly organised by  
the Gravitation and Relativity Division (GR) and  
the Hadronic and Nuclear Physics Division (HK)

Domenico Giulini  
ZARM Bremen and  
Leibniz University Hannover  
Institute for Theoretical Physics  
Appelstraße 2, 30167 Hannover  
giulini@itp.uni-hannover.de

Silvia Masciocchi  
GSI mbH  
Planckstr. 1  
64291 Darmstadt  
s.masciocchi@gsi.de

Neutron stars belong to the most extreme objects in our universe, whose properties stretch our imagination to its limits. Here are two examples: 1) On such a star, the weight of a teaspoon full of its average matter is comparable to that of a mass of our entire Moon placed on the surface of the Earth. 2) Strengths of magnetic fields exceed the critical one, at which the energy difference of a spin-up and spin-down electron is at the pair-production threshold. Clearly, the understanding of such objects poses an outstanding challenge to modern physics, involving an unusually rich and complex combination of our most fundamental theories. Our symposium aims to shed some light from various angles on the current status of this rapidly evolving and most fascinating field.

## Overview of Invited Talks and Sessions

(Lecture hall Audimax)

### Invited Talks

SYNS 1.1	Thu	14:00–14:40	Audimax	<b>Binary neutron stars: from gravitational to particle physics</b> — •LUCIANO REZZOLLA
SYNS 1.2	Thu	14:40–15:20	Audimax	<b>Probing subatomic physics with gravitational waves</b> — •TANJA HIN- DERER
SYNS 1.3	Thu	15:20–16:00	Audimax	<b>A NICER view of neutron stars</b> — •ANNA WATTS

### Sessions

SYNS 1.1–1.3	Thu	14:00–16:00	Audimax	<b>Symposium on Neutron Stars</b>
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