**Istituto Nazionale di Fisica Nucleare Laboratori Nazionali di Frascati**

Avviso di Seminario Teorico

# Dr. Reinier Meijer

Utrecht Univ. & Nikhef

**Gravitational Wave Searches**

Gravitational waves are displacements in gravitational fields which have allowed us unique astronomical insights, such as the first measurements of binary black holes. Before their very first detection in 2015, gravitational waves were unsure to exist. Even Einstein himself at one point tried to submit a paper in which he disclaimed them. He thought that surely they could not exist, and even if they did, their scale would forever remain unmeasurable. Such was the triumph when a gravitational wave was first detected in 2015, a full century after the theory of general relativity had been established. In this seminar we will look into: • A sketch of how gravitational waves arise from general relativity; • The methods used to establish the current catalogue of detections; • Current developments in anticipation of the new generations of observatories.

## Martedi’ 13/5 ore 14:00 Aula Seminari

https://agenda.infn.it/event/46903/

L'invito è esteso a tutto il personale interessato, che è caldamente invitato a partecipare.