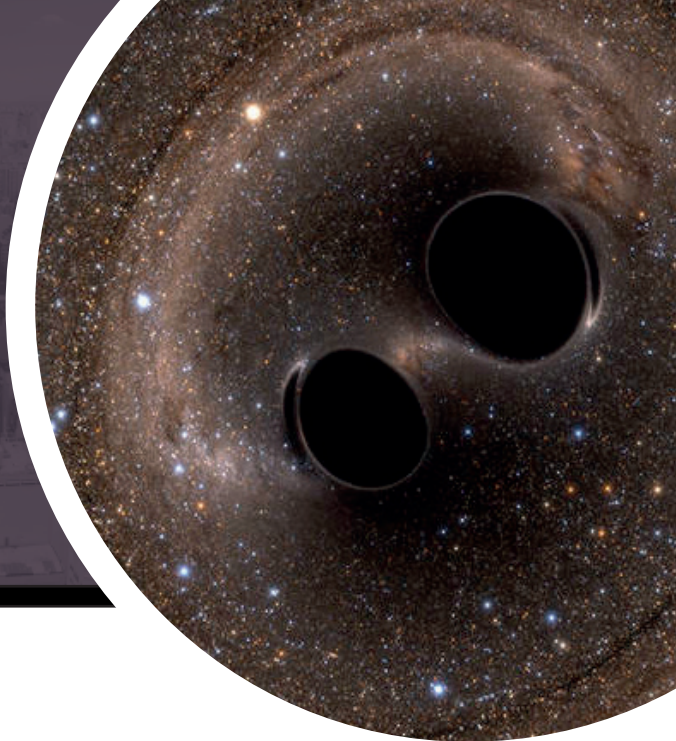


# THE SOUND OF SPACE-TIME: THE DAWN OF GRAVITATIONAL WAVE SCIENCE



**November 26 – December 14, 2018**  
at Instituto de Física Teórica - UNESP, São Paulo, Brazil

## LECTURERS

**Leor Barack/Adam Pound** (U. of Southampton, UK)  
**Luc Blanchet** (IAP Paris, France)  
**Sascha Husa** (U. of Balearic Islands, Las Palmas, Spain)  
**Rodrigo Nemmen** (IAG-USP, Brazil)  
**Walter Del Pozzo** (U. of Pisa, Italy)  
**Bangalore Sathyaprakash** (Pennsylvania State U., USA)  
**Daniel Siegel** (Columbia University, USA)  
**Jan Steinhoff** (AEI Potsdam, Germany)  
**Sylvia Zhu** (AEI Hannover, Germany)

GW Astronomy has become a truly interdisciplinary subject, and future leaders of this nascent field must not only be able to converse but also work on source understanding, data analysis and astrophysics, to realize the full potential of this new era. Typical searches for gravitational waves require very precise signal templates, which in turn demands state-of-the-art numerical and analytical models, to enable also the most accurate parameter estimation. Moreover, extracting the most information from the waveforms requires very efficient search algorithms for data-analysis, the physical interpretation

of results and their consequences in our understanding of astrophysics and fundamental questions being the ultimate goal of the field.

The school intends to offer a unique opportunity to train the new generation of researchers in this incipient field. At the end of the school students should be ready to contribute in all areas of this exciting new era of gravitational astronomy: the first week will develop the theoretical background, the second week more advanced topics are discussed and the third week contemplates astrophysics of sources and possible electromagnetic counterparts. There will be three lectures per day and problem sessions in the afternoon.

*The School has no registration fee and limited funds are available for travel and local expenses.*

**Application deadline:**

**September 21, 2018**

**Online application form and information:**

**<http://www.ictp-saifr.org/gw2018>**

## ORGANIZERS

**Luis Lehner** (Perimeter Institute, Canada)  
**Rafael A. Porto** (ICTP-SAIFR/IFT-UNESP, Brazil)  
**Riccardo Sturani** (IIP-Natal, Brazil)

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Carlos Brito Cruz - FAPESP scientific director  
Jacob Palis - Brazilian Academy of Sciences  
Juan Maldacena - Representing South America

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