

GRAVITATIONAL WAVES MEET AMPLITUDES IN THE SOUTHERN HEMISPHERE

August 14 – September 1, 2023
at Principia Institute, São Paulo, Brazil

CONFIRMED SPEAKERS

Fabian Bautista (IPhT Saclay, France)
Collin Capano (U. of Massachusetts - Dartmouth, USA)
Leonardo de la Cruz (IPhT Saclay, France)
Stefano Foffa (U. of Geneva, Switzerland)
Riccardo Gonzo (U. of Edinburgh, UK)
Alfredo Guevara (Harvard U., USA)
Maria Haney (NIKHEF – Amsterdam, the Netherlands)
Manfred Kraus (Mexico U., Mexico)
Luis Lehner (Perimeter I., Canada)
Oliver Long (Max Planck I.- Potsdam, Germany)
Raissa Mendes (UFF, Brazil)
Guilherme Pimentel (Scuola Normale Superiore – Pisa, Italy)
Adam Pound (U. of Southampton, UK)
Justin Vines (MPI for Gravitational Physics, Germany)
Mao Zeng (U. of Edinburgh, UK)
Aaron Zimmermann (U. of Texas – Austin, USA)

The central theme of the program will be the application of particle physics methods to the calculation of processes relevant to gravitational-wave phenomenology.

We intend to bring together both experts and younger theorists from three distinct communities:

- Classical General Relativity, including both analytic and numerical approaches;
- Effective Field Theories;
- Scattering Amplitudes.

We also want to bring theorists into contact with observers and analysis specialists from LIGO-Virgo-KAGRA.

We intend to have one talk a day, with lots of time available for informal discussions and collaboration. The building hosting the program is brand new with comfortable discussion areas, right next to the intended hotel in the tourist center of São Paulo. We hope to have fifteen to twenty people in residence each week.

This activity will be preceded by the School on Modern Amplitude Methods for Gauge and Gravity Theories. Selected students attending the school have the option of remaining as observers.

There is no registration fee.

Registration deadline:

July 2, 2023

Online application form and more information:

<https://www.ictp-saifr.org/gwa2023/>

ORGANIZERS

Fernando Febres Cordero (Florida State U., USA)
 David Kosower (U. Paris-Saclay, France)
 Patricia Schmidt (U. of Birmingham, UK)
 Riccardo Sturani (ICTP-SAIFR/IFT-UNESP, Brazil)

ICTP-SAIFR STEERING COMMITTEE
 Atish Dabholkar - ICTP Trieste director
 Pasqual Barretti - UNESP rector
 Luiz Eugênio Mello - FAPESP scientific director
 Hugo Aguilaniu - President-Director of Serrapilheira I.
 Luiz Davidovich - President of Brazilian Acad. of Science
 Juan Maldacena - Representing South America

ICTP-SAIFR SCIENTIFIC COUNCIL
 Carlos Brito Cruz (chair) - Elsevier, UK
 Rosario Fazio - ICTP representative
 Alexandre Reily Rocha - IFT-UNESP director
 William Bialek - Princeton U.
 Eduardo Fradkin - U. Illinois
 Gabriela Gonzalez - LIGO, Louisiana State U.
 André de Gouvêa - Northwestern U.
 Michael Green - U. of Cambridge, UK
 Karen Hallberg - Balseiro Inst., Bariloche
 Luis Lehner - Perimeter Inst., Waterloo

ICTP-SAIFR STAFF
 Nathan Berkovits - Director
 Rogerio Rosenfeld - Vice-Director
 Pedro Vieira - Perimeter-SAIFR Coordinator
 Jandira Oliveira - Executive Manager
 Humberto Neto - Executive Secretary
 Lilia Faria - Financial Manager
 Marrey Peres, Jr. - Operations Manager
 Malena Stariolo - Science Journalist
 Tiago Codinhoto - Technical Assistant