

Rio de Janeiro, May 2nd, 2025

### Third Announcement

International Meeting on

#### **HIGH-ENERGY PHENOMENA IN RELATIVISTIC OUTFLOWS IX**

Rio de Janeiro, August 4-8, 2025

<https://hepro9.iar.unlp.edu.ar/>

The series of conferences High-Energy Phenomena in Relativistic Outflows, HEPRO, reaches its ninth edition. HEPRO IX will be held in Rio de Janeiro, Brazil, from August 4 to August 8, 2025. The meeting will be hosted by the [Centro Brasileiro de Pesquisas Físicas \(CBPF\)](#) and the [Instituto Argentino de Radioastronomía \(IAR\)](#). The conference will be devoted to the presentation and discussion of hot recent observational, phenomenological, and theoretical developments in the field of high energy phenomena associated with relativistic winds and jets. There will be both invited reviews and highlighted talks that will cover the most recent work in the field. Plenty of time will be devoted to discussions.

#### **Registration and abstract submission:**

The **deadline for abstract submission is May 15th**. Those interested in attending the meeting are encouraged to register and submit their abstracts as soon as possible, completing the forms available in the meeting's webpage: <https://hepro9.iar.unlp.edu.ar/>

Participants are expected to make their own **lodging arrangements**. We strongly recommend booking well in advance. Botafogo offers a variety of options, or the neighborhood of Copacabana and Ipanema are also good choices, since there is a metro that connects quite easily from these places.

#### **Invited speakers:**

The confirmed **invited speakers** and the general topics for HEPRO IX are:

- Alexander Tchekhovskoy (Northwestern University): *Jet physics*
- Elisabetta Bissaldi (Polytechnic University of Bari): *Overview of GRBs*
- Ken Ohsuga (University of Tsukuba): *Radiation-driven outflows*
- Markus Böttcher (North-West University): *X-ray polarization in jets*
- Felix Aharonian (Max-Planck-Institut für Kernphysik): *TBD*
- Gaëtan Fichet de Clairfontaine (University of Valencia): *Theory of relativistic jets*
- Sara Buson (Universität Würzburg): *Neutrinos in outflows*
- Silvia Celli (La Sapienza University of Rome): *Neutrinos from relativistic outflows: recent discoveries*
- Grzegorz Kowal (University of São Paulo): *Magnetic reconnection in outflows*

- Marc Ribó (University of Barcelona): *Gamma-ray binaries: recent observational results*
- Min Zha (Institute of High Energy Physics): *LHAASO PeVatrons*
- Andrzej A. Zdziarski (Nicolaus Copernicus Astronomical Center): *Theory of microquasars jets*
- Enrico Peretti (Niels Bohr Institute): *Particle transport in jets*
- Florencia L. Vieyro (Instituto Argentino de Radioastronomía): *Recent progress in FRB theory*
- Luca Comisso (Columbia University): *Plasma turbulence in relativistic outflows*
- Yannis Liodakis (FORTH): *Optical polarization in jets*
- María Victoria del Valle (University of São Paulo): *Variable gamma-ray sources in the Galaxy*
- Lia Medeiros (University of Wisconsin, Milwaukee): *Origin of relativistic jets with application to M87*

Additional information and details are available at the webpage of the meeting, <https://hepro9.iar.unlp.edu.ar/>

We look forward to seeing you in HEPRO in Rio!

Gustavo E. Romero and Ulisses Barres de Almeida, on behalf of the organizers.