



## Campus of IFT-UNESP & Principia Institute – São Paulo, Brazil



**July 8 – 19, 2024**

# SECOND SCHOOL ON DARK MATTER AND NEUTRINO DETECTION

## CONFIRMED LECTURERS

### Main courses and advanced topics:

- Nicolás Bernal** (NYU Abu Dhabi, United Arab Emirates): *Dark Matter beyond WIMPs*  
**Arman Esmaili** (PUC-RJ, Brazil): *Dark Matter and Neutrino detectors*  
**Graciela Gelmini** (UCLA, USA): *Dark Matter*  
**Matheus Hostert** (Harvard): *Neutrinos Beyond the Standard Model*  
**Pedro Machado** (FNAL, USA): *Neutrinos*  
**Daniel Pershey** (FSU, USA): *Neutrino Detection*  
**Javier Tiffenberg** (Fermilab, USA & UBA, Argentina): *Dark Matter Detection*

### Experiments:

- Ana Botti** (Fermilab, USA): *Particle detection with a CMOS camera*  
**Franciole Marinho** (ITA, Brazil): *LAr experiment design with simulations*  
**Laura Paulucci** (UFABC, Brazil): *ARAPUCA*  
**Dario Rodrigues** (UBA, Argentina): *Sensitivity and exclusion limits*

The aim of the school is to introduce the students to the field of particle Dark Matter and Neutrino Detection, share the excitement on model building and detection methods, and prepare the next generation to contribute to this endeavor. It will be composed of courses and lectures on advanced topics, with significant time for questions/discussions and practical hands-on activities. The labs which demonstrate techniques used in real experiments are a key part of the school.

The first week will take place in the IFT-UNESP auditorium and will give a general introduction to the fields of Dark Matter and neutrino physics with a more theoretical focus, providing the basis to address the detection methods. The second week will take place at the Principia Institute and will focus on detection techniques and specific experiments, with most of the afternoon dedicated to experimental work in small groups.

There is no registration fee and limited funds are available for travel and local expenses.

**Application deadline: May 4, 2024**

**Online application and more information:  
[www.ictp-saifr.org/ssdmnd2024](http://www.ictp-saifr.org/ssdmnd2024)**



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