



International Centre for Theoretical Physics
South American Institute for Fundamental Research

Campus of IFT-UNESP - São Paulo, Brasil



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Standard Model and Beyond



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Amplitudes and applications



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Cosmology and Particle Physics



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Formal developments in Beyond Standard Models



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Collider Physics



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Dark Matter

June 24 – July 5, 2024

III JOINT ICTP-SAIFR/ICTP-TRIESTE SUMMER SCHOOL ON PARTICLE PHYSICS

The Standard Model of Particle Physics (SM) has been tested at unprecedented levels at the LHC and other facilities. Although extremely successful, the SM is known to be incomplete, since it does not address issues such as the origin of neutrino masses and the nature of dark matter and dark energy.

The six courses at the third edition of the Joint ICTP-SAIFR/ICTP-Trieste Summer School on Particle Physics will cover some of these topics. In the first week the courses will provide a review of the SM, its shortcomings and how to explore Physics beyond it, a discussion of the future of particle accelerators and the connection of particle physics with cosmology. The second week will address the issue of dark matter and the more formal developments in approaching Physics beyond the Standard Model, as well as the use of amplitude methods in particle physics.

This activity will be followed by the **Second School on Dark Matter and Neutrino Detection** from **July 8 to 19**.

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

Application deadline: April 20, 2024

Online application and more information:
www.ictp-saifr.org/sspp2024



ORGANIZERS

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