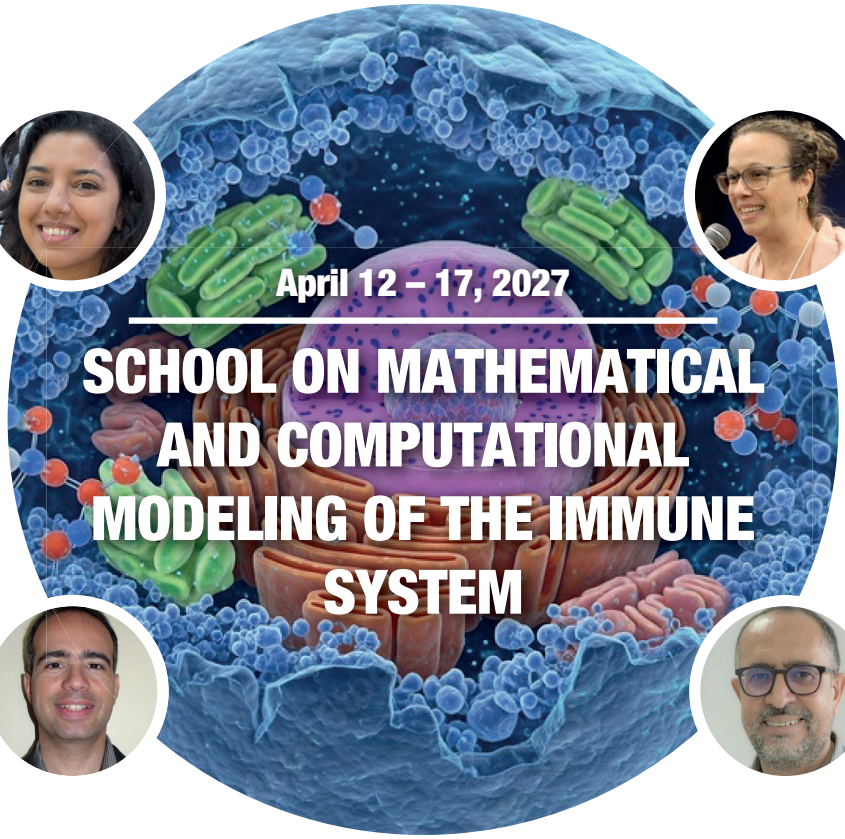
ICTP SAIFR | International Centre for Theoretical Physics
South American Institute for Fundamental Research

Campus of IFT-UNESP – São Paulo, Brazil



April 12 – 17, 2027

SCHOOL ON MATHEMATICAL AND COMPUTATIONAL MODELING OF THE IMMUNE SYSTEM

BÁRBARA DE MELO QUINTELA
UFJF, Brazil

CLAUDIA PIO FERREIRA
Unesp, Brazil

MARCELO LOBOSCO
UFJF, Brazil

MOSTAFA ADIMY
INRIA, France

The school aims to provide an overview of mathematical and computational methods for understanding immune responses and their roles in health and disease. The program will cover the fundamentals of innate and adaptive immunity, mathematical modeling using ordinary and partial differential equations (ODE and PDE), multiscale modeling, and computational simulations, with applications to viral and bacterial infections and vaccination. The school is intended for final year undergraduate students, graduate students, and postdoctoral researchers in physics, mathematics, computer science, engineering, biology, immunology, and related fields. The program includes practical activities and group projects. These activities will encourage the exchange of ideas, discussions, and future collaborations.

Application deadline:
January 13, 2027

Online application and more information:
ictp-saifr.org/smcmis2027

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