



Campus of IFT-UNESP - São Paulo, Brasil

October 30 – November 3, 2023

SCHOOL ON MATHEMATICAL MODELING AND GOVERNANCE



CLAUDIA PIO FERREIRA
IBB – Unesp, Brazil



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The context of governance challenges science. Mathematical modeling can be part of the solution, but it can be a part of the problem as well. The school aims to develop an awareness of the challenges involved and will provide “food for thought” to develop comprehension of what is involved, a consciousness of the capabilities, limitations of mathematical modeling in decision-making, and self-awareness. We will address the question: Why and how science for governance is “science with consciousness” (also called complex thinking) and must be different from “everyday science” (technically speaking: normal science).

The course will address how a complex systems approach modifies our mathematical modeling. We will critically examine stochastic models and their relations to deterministic ones emphasizing the trade-off between mathematical accessibility and truth value.

The second part of the course will address, in mathematical form, decision theory and its relation to game theory. We will discuss decision making under uncertainties, game equivalence, game strategies, evolutionary games and more.

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

Application deadline: August 27, 2023

Online application and more information:

www.ictp-saifr.org/mmg2023



ORGANIZERS

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