



Salam Distinguished Lecture Series 2025:

**Prediction in Immune Repertoires:
Learning Rules in a Self-organised Mess**

Professor **Aleksandra Walczak**

**27 and 28 January 2025
Budinich Lecture Hall
ICTP**

27 Jan, 11:00

Lecture 1
How
personalised is
your immune
repertoire?

27 Jan, 14:00

Lecture 2
Optimal immune
systems

28 Jan, 11:00

Lecture 3
Viral-immune
co-evolution

Biosketch:

Aleksandra Walczak received her PhD in physics at the University of California, San Diego, working on models of stochastic gene expression. After a graduate fellowship at KITP, she was a Princeton Center for Theoretical Science Fellow, focusing on applying information theory to signal processing. Currently she is a CNRS research director at the Ecole Normale Supérieure in Paris, interested in collective behaviour, fly development and statistical descriptions of the immune system. She was awarded the "Grand Prix Jacques Herbrand de l'Académie des sciences" in 2014, the bronze medal of CNRS in 2015, the American Physical Society Fellowship, the Prix Jean Ricard of the French Physics Society in 2021 and the silver medal of CNRS in 2024.

