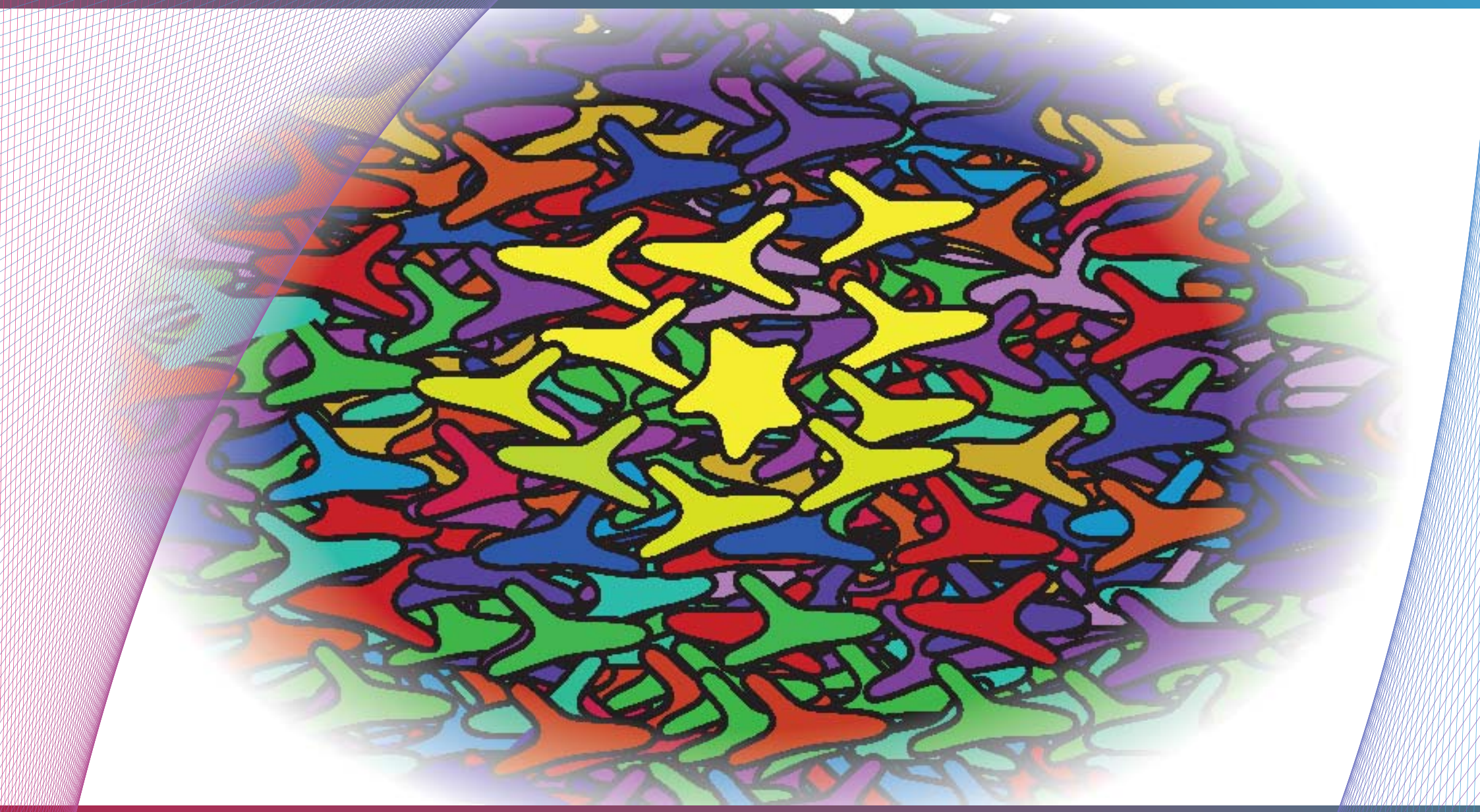
# PHYSICS COLLOQUIA 2021/2022



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## PREDICTION IN IMMUNE REPERTOIRES

ore 14:30 | **ZOOM VIDEO** | https://zoom.us/my/aula.dottorato

JAN 25 2022

Living systems often attempt to calculate and predict the future state of the environment.
Given the stochastic nature of many biological systems how is that possible?
I will show that even a system as complicated as the immune system has reproducible outcomes.
Yet predicting the future state of a complex environment requires weighing the trust
in new observations against prior experiences.
In this light, I will present a view of the adaptive immune system as a dynamic Bayesian machinery
that updates its memory repertoire by balancing evidence from new pathogen encounter
against past experience of infection to predict and prepare for future threats.

progetto grafico: roberto perego | www.nonacaso.it

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