UNIVERSITÀ DI TRENTO | Dipartimento di Matematica

PhD OPENING 2023

April 5th, 2023 from 14:30

Room **A109**
Polo Ferrari 1
Via Sommarive 5 – Povo

PhD Program in Mathematics

14.30
Welcome
Valter Moretti (PhD Coordinator)

14.45
Ilaria Dorigatti
Imperial College London

Modelling arbovirus transmission and the impact of novel interventions

Abstract: Mathematical and statistical models are useful tools to analyse epidemiological data. They allow us to characterise heterogeneities in transmission and can help assess the impact of existing and novel control interventions. In this seminar, I will present a few recent modelling studies developed to analyse the transmission dynamics of vector-borne diseases and to quantify the efficacy of a new dengue antiviral drug and dengue vaccine candidate. I will discuss current approaches for model calibration as well as challenges and opportunities in infectious diseases modelling.

15.40
Break

15.50
XXXVIII cycle PhD Students Presentation

16.20
Roberto Natalini
Istituto per le Applicazioni del Calcolo "M. Picone" (IAC-CNR)

The way organisms are formed: Cell movement and mathematical models

Abstract: Since the seminal book "On growth and form" by D'Arcy Thompson, mathematicians have sought to understand the laws governing the organization of biological aggregates. From simple bacteria to our bodies, it is difficult to master the phenomena underlying the formation of a complete organism. Modern theories begin with ideas proposed by Alan Turing in the 1950s, which we are now attempting to address with more sophisticated models involving stem and cancer cells and organ generation.

Information
phd.maths@unitn.it
www.unitn.it/en/drmath