



**UNIVERSITÀ  
DI TRENTO**  
Dipartimento di  
Matematica



# DOTTORATO

**February 13 - 14, 2023**

**Lorenzo Tamellini**

(IMATI-CNR, Pavia)

The Dr. Lorenzo Tamellini will conclude the PhD course "Parameter estimation in biology" with a cycle of seminars on Uncertainty Quantification (UQ), which will be held:

- Monday, February 13, 2023 – at 2.30 - 6.00 pm in Seminar Room "-1" - PovoZero
- Tuesday, February 14, 2023 – at 9.00 - 12.30 am in Seminar Room "-1" - PovoZero

**Course program:**

1. Introduction, random fields.
2. Forward UQ: Methods of polynomial approximation and focus on sparse grids
3. Forward UQ: extension to multi-fidelity methods
4. Inverse UQ: Bayesian inversion (Markov-Chain-Monte-Carlo, Gaussian approximation) and posterior-based forward UQ

**Contact Person:**

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**CONTATTI**

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