



UNIVERSITÀ  
di VERONA

Scuola di Dottorato  
di SCIENZE NATURALI  
ED INGEGNERISTICHE

# LECTIO MAGISTRALIS

## “Elements of concurrency theory, or: semantic basis for today's computer science”

**June 20<sup>th</sup>, 2019 - h. 11.00**

**Prof. Davide Sangiorgi**

Università di Bologna

### Abstract:

In the first part of the talk I will discuss the origins of a few important concepts of concurrency theory that today are at the heart of Computer Science.

The second part of the talk will be more focused on reasoning techniques. Following on some concepts introduced in the first part I will discuss coinduction.

Coinduction is the dual of induction -- a pervasive tool in Computer Science and Mathematics for defining objects and proving properties on them. Today coinduction is widely used in Computer Science, but also in other fields, including Artificial Intelligence, Cognitive Science, Mathematics, Modal Logics, Philosophy, particularly for reasoning about objects that may be potentially infinite or circular.

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The lecture will take place **at 11.00 – Sala Verde – Cà Vignal – Strada Le Grazie, 15**

Local organization and contact:

Prof. Massimo Merro  
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Students attending this lecture are entitled to 1 CFR valid for the specific activities of the Graduate School.

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