



TensorDec Laboratory  
algebra, geometry and applications of  
tensor decompositions



UNIVERSITÀ  
DI TRENTO  
Dipartimento di  
Matematica

25 - 29 November 2024 | Polo Ferrari - Povo 1

Masterclass

# Tensor Decompositions and Applications in Multi-Omics Data Analysis

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Omics technologies, including genomics, transcriptomics, proteomics, and metabolomics, have revolutionized biological research by enabling comprehensive, high-throughput analysis of molecular components within cells and organisms. The resulting high-dimensional datasets pose significant analytical challenges, particularly in integrating diverse data types and uncovering complex biological relationships. Tensor-based approaches have emerged as powerful tools for analyzing these high-dimensional omics data, offering advantages over traditional matrix-based methods in capturing complex, multi-way relationships.

## SCHEDULE

Monday 25	11:30 - 13:30	Room A108
Tuesday 26	15:30 - 17:30	Room A102
Wednesday 27	12:30 - 14:30	Room A203
Thursday 28	10:30 - 12:30	Room A209
Friday 29	11:30 - 13:30	Room A209

The lecture will also be available in streaming via ZOOM.  
The link will be shared to the registered participants.

Scan the QR code for info  
and registration

