

TH SCIENCES, UNIVERSITY OF TORINO

## 18 DECEMBER

2:30 P.M.

ROOM A110 - POVO 1



- A MULTI-OMICS, MULTI-MODAL DATASET FOR
- VALIDATING CELL-TO-CELL COMMUNICATION
- (CCC) BIOINFORMATICS TOOLS

Cell-cell communication (CCC) is a fundamental mechanism regulating biological processes in multicellular systems under both normal and pathological conditions. The growing number of computational tools inferring CCC from transcriptomic data highlights the need for robust benchmark resources enabling objective evaluation. Yet, the absence of experimentally validated, multi-modal datasets reflecting the molecular complexity of intercellular signaling has limited systematic comparison and performance assessment of CCC algorithms. To address this gap, we generated a comprehensive multi-omics dataset tailored for performance assessment of CCC bioinformatics tools. As proof of concept we will shows some results on CellChat v2 predictions.