



Ca' Foscari
University
of Venice

Department of Molecular
Sciences and Nanosystems



PhD Day

Event organized within the framework
of the ***Engineering Physics Colloquia***

17th July 2026

9.00-12.30 PhD Talks

Conference Room Orio Zanetto, Alfa Building (session A)

Auditorium Danilo Mainardi (session B)

12.30-13.30 Poster Session in Alfa Building

SESSION A, 9.00 - 12.30

Conference Room Orio Zanetto

Organizer: **Domenico De Fazio, Andrea Droghetti e Guido Caldarelli**

Chair: **Andrea Droghetti**

9.00–10.00 *Keynote speaker*

Ivan Rungger, *Quantum computing versus classical computing: which is better and how can one integrate them?*

10.00–10.10 *PhD talk*

Silvia Multari, *Fast Structure-Based De Novo Drug Design with Molecular Encoders and Computational Intelligence*

10.10–10.20 *PhD talk*

Federico Surra, *modellistica sistemica stock- flow per la progettazione di un simulatore della dinamica di evoluzione del cancro ovarico, con possibilità di indagine delle diverse strategie terapeutiche*

10.20–10.30 *PhD talk*

Muhammad Ali, *NETWORK BASED DRUG REPURPOSING AGAINST NEPHRITIS (MYH9)*

10.30–11.00 Coffee Break

Chair: **Guido Caldarelli**

11.00–12.00 *Keynote speaker*

Elisa Omodei, *Investigating human behavior on social media through network and data science approaches*

12.00–12.10 *PhD talk*

Gloria Laudato, *Assessment of tumor evolution using a single – cell metabolic liquid biopsy in droplet microfluidics*

12.10–12.20 *PhD talk*

Cristian Fregonese, *Evaluating the Performance of Scoring Functions on Crystal Structures and Conformational Ensembles of Cyclic Peptide-Protein Complexes*

12.20–12.30 *PhD talk*

Konstantin Sukharnikov, *A Versatile Mega-Frame Test Bench for Future European XFEL Detectors: Design and AI-Driven Model Based System Engineering*

Organizer: **Sabrina Tamburini**



SESSION B, 9.00 - 12.30

Auditorium Danilo Mainardi

Chair: **Sabrina Tamburini**

9.00–9.10 PhD talk 1

Jacopo Cangiotti, *Singly-doped Cr³⁺ and Mn⁵⁺ Near-Infrared Emitting Materials for Remote Temperature and Pressure Sensing*

9.10–9.20 PhD talk 2

Anna Bertocco, *Osteoconductive and antibacterial 3D-printed CaP scaffolds with hierarchical porosity for biomedical applications*

9.20–9.30 PhD talk 3

Zhihao Xiang, *Smart Self-Healing Luminescent Solar Concentrators Based on Carbon Dots*

9.30–09.40 PhD talk 4

Sara Mennella, *Gut microbiota dynamics to SARS-CoV-2 infection in a gut in-vitro system*

9.40–9.50 PhD talk 5

Nicola Furlan, *Development of Electrochemical Platforms for Neurodegenerative Disease Models: From Electrochemical Immunoassays to Electroactive Scaffolds and Non-Enzymatic Neurotransmitter Sensors*

9.50–10.00 PhD talk 6

Alexandru Dron, *Electroactive and bio-responsive inks based on modular and degradable 2D electrocatalysts*

10.00–10.10 PhD talk 7

Amir Abdelmohsen, *Nanostructured materials in synergy with 2D materials for the protection of archaeological metallic objects*

10.10–10.20 PhD talk 8

Laura Tripodi, *Precision nanotherapy in Ovarian Cancer*

10.20–10.30 PhD talk 9

Martina Glerean, *Microfluidic Development of Polymer and Lipid-Based Delivery Systems for Therapeutic Inorganic Nanoparticles*

10.30-10.40 PhD talk 10

Xihao Liu, *Optimisation of the properties of organic photovoltaic semiconductor films*

10.40–11.00 Coffee break in Alfa Building, ground floor

11.00–11.10 PhD talk 11

Amira bouali, *Black G-C₃N₄-MoS₂ For Solar Driven Water Desalination*

11.10–11.20 PhD talk 12

Farzaneh Rahimpour, *Tuning the Defect-Crystallinity Synergy in High-Entropy Layered Double Hydroxide for the Oxygen Evolution Reaction*

11.20–11.30 PhD talk 13

Giulia Cazzador, *Laser-Induced Graphene Platforms for Sustainable Sensing*

11.30–11.40 PhD talk 14

Kubra Kocak, *Host-Microbiota Crosstalk in Ovarian Cancer*

11.40–11.50 PhD talk 15

Eleonora Botter, *Synthesis and encapsulation in nanocarriers of novel organopalladium complexes of medicinal interest*

11.50–12.00 PhD talk 16

Giorgia Schinello, *Vascular ECM in cancer: a genome-wide transcriptomic analysis reveals a novel link to immune regulation*

12.00–12.10 PhD talk 17

Sabrina Molinaro, *Protection treatment for glass surfaces based on amine-functionalised dendritic mesoporous silica nanoparticles: a multi-analytical study*

12.10–12.20 PhD talk 18

Sofia Scipioni, *Cellulose-based nanostructured materials for paper restoration*

12.20–12.30 PhD talk 19

Mahnoor Hassan, *Carbon Dots–InP Quantum Dots Hybrid Nanostructures for High-Performance Luminescent Solar Concentrators*

POSTER SESSION, 12.30

from 12.30 - Alfa Building Ground Floor

Chair: **Domenico De Fazio & Sabrina Tamburini**

PhD poster 1

María Dolores

Contreras Martínez Antimicrobial Nanomaterials for Advanced Surface Protection Applications

PhD poster 2

Emanuele Di Siena

Loss of Multimerin-2 triggers an inflammatory response in the endothelium

PhD poster 3

Ermanno Di Sopra

Primary HGSOc microenvironment in-vitro maintenance

PhD poster 4

Aurora Karletsos

Leveraging molecular subtypes of HNSCC to tailor antitumor therapies

PhD poster 5

Micaela Sgarlata

Static and dynamic HGSOc organoids to model standard and innovative therapies

PhD poster 6

Sayyam Ahsan

Terahertz Time-Domain Spectroscopy for the Characterization of Quantum Materials from Room Temperature to Cryogenic Conditions

PhD poster 7

Antonella Dadduzio

Bio-inspired and Sustainable Materials for Organic Electrochemical Transistors

PhD poster 8

Alessandro Metelli

Self Assembly of Associative Polymers

PhD poster 9

Davide Spallarossa

Syntesis, characterization and analysis of the materials space

PhD poster 10

Raghisa Yasin

MACHINE LEARNING ASSISTED NMR SPECTRUM ANALYSIS

