



11th scientific day of the thematic
doctoral school METAMORPHOSE

Thursday 22 May 2025

Université Catholique de Louvain – UCLouvain

Auditoire Cycle 01, Bâtiment Marc de Hemptinne, Chemin du
Cyclotron 2, B-1348 Louvain-la-Neuve.

9:00	WELCOME
9:05	Introduction
Chair:	Clément LAUZIN (UCLouvain)
9:10	Stephan SCHLEMMER (University of Koeln) (invited speaker): <i>Missing Ions in Laboratory and Space.</i>
9:55	Prachi MISRA (University of Koeln): <i>Facilitating the Search of 1-Amino-2-Propanol in Space by Studying its Rotational Spectrum.</i>
10:15	Simon COLLIGNON (UCLouvain): <i>Precision Time-Domain Spectroscopy of the $2_0 E \leftarrow 3_{-1} E$ Methanol Maser Transition at 12.2 GHz.</i>
10:35	Ulysse FRIER (UCLouvain) : <i>Benchmarking the performances of the eXact Integral Simplified Time-Dependent Density Functional Theory (XsTD-DFT) to model UV-visible absorption spectra for transition metal complexes involving Ru, Os, Ir and Rh atoms.</i>
10:55	COFFEE BREAK
Chair:	Pascal QUINET (UMONS)
11:10	Lucas MAISON (UMONS) : <i>Radiative Parameters for Forbidden Lines in Lanthanide Ions Relevant in Kilonovae Nebular Phase Modeling.</i>
11:30	Maxime BRASSEUR (UMONS) : <i>Atomic data for Os VI spectral lines of interest to nuclear fusion research from independent computational approaches.</i>
11:50	Xavier HUET (ULB) : <i>Rovibronic spectra of carbon monoxide dication CO^{2+}.</i>
12:10	LUNCH (sandwich buffet)

Chair:	Pascal KOCKAERT (ULB)
13:00	Samir KASSI (University of Grenoble-Alpes) (invited speaker): <i>Highly Accurate Molecular Spectroscopy with Optical Cavities.</i>
13:45	Carla T. SILVA TAFUR (ULB) : <i>High Resolution Study of the ν_{14} Band of Pyrrole (C_4H_5N) near 14 μm.</i>
14:05	Arthémise ALTMAN (UCLouvain): <i>Spectroscopy of Methanol in the Near-Infrared at the 10^{-13} Level.</i>
14:25	Mariù G. MARALDI (UCLouvain): <i>Towards all-atom QM methodologies using XsTD-DFT method for one- and two-photon absorption.</i>
14:45	COFFEE BREAK
Chair:	Christophe CAUCHETEUR (UMONS)
15:00	Nicolas LE THOMAS (UGent) (invited speaker): <i>Photonic Integrated Circuits for UV Microscopy and Sensing.</i>
15:45	Karina SOGOMONYAN (KULeuven) : <i>Rotational Excitation of Vinyl Cyanide in Interstellar Medium.</i>
16:05	FINAL REMARKS
16:10	END OF MEETING