



EOS
THE EXCELLENCE
OF SCIENCE

KU LEUVEN

ULB UNIVERSITÉ
LIBRE
DE BRUXELLES

UMONS
Université de Mons

MEETING OF THE EOS MANASLU PROJECT

**Molecular, Atomic, Nuclear and Astrophysics
research for heavy elements studies**

University of Mons

December 4, 2023

**Auditoire Charles Plisnier – Grands Amphis – Campus de la
Plaine de Nimy – Avenue du Champ de Mars – 7000 Mons**

Program of the EOS MANASLU meeting – UMONS – December 4, 2023

10.00 – 10.10	Piet Van Duppen (KU Leuven) <i>The MANASLU Project</i>
10.10 – 11.10	Session 1 Chair: Nicolas Chamel (ULB)
10.10 – 10.30	Arno Claessens (KU Leuven) <i>Ionization potentials of thorium using in-gas-jet laser ionization spectroscopy</i>
10.30 – 10.50	Yens Elskens (KU Leuven) <i>Half-life measurements of Th-229m: current status and future prospects</i>
10.50 – 11.10	Skyy Pineda (KU Leuven) <i>Energy Determination of the 229Th Nuclear Clock Isomer using VUV spectroscopy</i>
11.10 – 11.30	Coffee break
11.30 – 12.50	Session 2 Chair: Gerda Neyens (KU Leuven)
11.30 – 11.50	Pierre Lassegues (KU Leuven) <i>Atomic physics studies of the heaviest alkaline francium: first results on the 9P states</i>
11.50 – 12.10	Fedor Ivandikov (KU Leuven) <i>Benchmarking the COMSOL simulations of JetRIS with a recoil source</i>
12.10 – 12.30	Antoine De Roubin (KU Leuven) <i>Last steps of the S3-LEB offline commissioning</i>
12.30 – 12.50	Michail Athanasakis-Kaklamanakis (KU Leuven) <i>New results from the spectroscopy of actinide molecules at CRIS in ISOLDE</i>
12.50 – 13.50	Lunch

13.50 – 15.10	Session 3 Chair: Patrick Palmeri (UMONS)
13.50 – 14.10	Andreas Flörs (GSI, Darmstadt, Germany) <i>A complete and calibrated set of lanthanide opacities</i>
14.10 – 14.30	Jérôme Deprince (ULB & UMONS) <i>From HFR atomic data to kilonova ejecta opacities</i>
14.30 – 14.50	Lucas Maison (UMONS) <i>Calculation of forbidden lines in lanthanide ions for kilonova nebular phase</i>
14.50 – 15.10	Helena Carvajal Gallego (UMONS) <i>Statistical RTA approach for atomic data simulations to model early kilonova opacities</i>

15.10 – 15.30	Coffee break
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15.30 – 16.50	Session 4 Chair: Stéphane Goriely (ULB)
15.30 – 15.50	Jan Sermeus (KU Leuven) <i>VR-EVEREST: a case study on a science communication effort</i>
15.50 – 16.10	Wouter Ryssens (ULB) <i>BStG models versus experiments</i>
16.10 – 16.30	Chiranjib Mondal (ULB) <i>The T-dependent equation of state of neutron stars</i>
16.30 – 16.50	Riano Giribaldi (ULB) <i>The barium isotopic composition in s- and r-enriched stars</i>

17.00 – 18.00	EOS MANASLU Board meeting (Room A011, Pentagon building)
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