

4th French-Czech «Barrande» Nuclear Research Workshop

- Advancing Science through Bilateral Collaborations -

Organized by: Grand Accélérateur National d'Ions Lourds, French Embassy in Czech Republic,
Nuclear Physics Institute of the Czech Academy of Sciences

October 10th-12th, 2023
Mont Saint-Michel, France

Main programme

Tuesday, October 10th

14:40 Transport from Paris Paris Roissy Charles de Gaulle Airport to GANIL, Caen (bus)
18:30 Transport from Caen to Mont Saint-Michel (bus)
20:30 Dinner in restaurant "Les Terrasses de la Baie"

Wednesday, October 11th

09:00 Presentations by Czech and French researchers
10:30 Coffee break
10:45 Continuation of presentations by Czech and French researchers
12:30 Lunch at Restaurant "Le Relais Saint-Michel"
14:00 Presentations by Czech and French researchers
15:30 Coffee break
15:45 Continuation of presentations by Czech and French researchers
19:30 Dinner at Restaurant "La Mère Poulard"

Thursday, October 12th

09:00 Presentations by Czech and French researchers
10:30 Coffee break
10:45 Continuation of presentations by Czech and French researchers
12:30 Lunch at Restaurant "Le Relais Saint-Michel"
14:00 Transport from Mont Saint-Michel to GANIL in Caen (bus)
16:00 Discussion panels/working groups and Wrap-up session
18:00 IRP NuAG Steering committee meeting
19:00 Banquet at the GANIL guest house

Friday, October 13th

06:30 Transport from GANIL to Paris Roissy Charles de Gaulle Airport (bus)
10:00 Arrival at the airport.

Web Site: <https://barrandewks2023.sciencesconf.org/>

Funding agencies: Program Access France, GANIL, IRP NuAG, French Embassy in Czech Republic, NPI CAS, Caen la mer



Wednesday, October 11th

Introduction

Chairperson: Véronique Debord-Lazaro

09:00 *Opening words*

Véronique Debord-Lazaro (French Embassy in Czech Republic)

09:10 [Programs and Projects at GANIL/SPIRAL2](#)

Patricia Chomaz (GANIL)

09:30 *Research facility and program in NPI CAS*

Ondřej Svoboda (NPI CAS)

Biological applications

Chairperson: Gilles De France

09:50 *Challenges in novel medical radionuclides production*

Ondrej Lebeda (NPI)

10:20 *Production of Tb-155 with Gd-155 highly enriched targets: first results and perspectives*

Morgane Bouteculet (IJCLab)

10:40 Coffee break

11:10 *Separation, purification and concentration of Ac-225 using solid extractants*

Katerina Ondrak Fialova (NPI)

11:30 *Medical applications research within the frame of the national Research Group MI2B*

Denis Dauvergne (Director of GDR MI2B)

11:50 *PBCT as a novel approach in proton therapy*

Pavel Bláha (NPI)

12:10 *3-dimensional scintillation dosimetry for small irradiation fields control in proton therapy*

Gautier Daviau (GANIL)

12:30 Lunch at "Le Relais Saint Michel" restaurant

14:00 [Radiation chemistry of RRX-001](#)

Barbora Sedmidubská (HJ-Institute)

14:20 *R&D activities for alpha-radiotherapy at GANIL*

Gilles de France (GANIL)

Nuclear energy and technologies

Chairperson: ????

14:40 The Role of CEA R&D and Innovation in the French Energy Transition

Laurence Portier (CEA/DES/DSE Saclay)

15:10 New reactors in Central Europe

Radek Škoda (West Bohemia University)

15:30 3rd and 4th generation R&D at CEA, global low CO₂ Energy systems

Franck MORIN (IRESNE I Institut de recherche sur les systèmes nucléaires pour la production d'énergie bas carbone, CEA Cadarache)

15:50 [Total Absorption Gamma-ray Spectroscopy for applied and fundamental physics](#)

Amanda Porta (Subatech, Nantes)

16:10 Coffee break

Nuclear Astrophysics

Chairperson: Jaromir Mrazek

16:40 Big Bang Nucleosynthesis

Alain Coc (IJC Lab)

17:10 Indirect methods in nuclear astrophysics, activation experiments on NFS

Jaromir Mrazek (NPI)

17:30 [LP40-365: The surviving remnant of a subluminous Type Ia supernova](#)

Peter Nemeth (Astronomical Institute of the Czech Academy of Sciences, Ondřejov)

17:50 A new experiment proposed to study the $^{18}\text{F}(p,\alpha)^{15}\text{O}$ reaction

Laurie Dienis (GANIL)

18:10 Nucleosynthesis of Ta-180 in stellar environment

Adam Prášek (Department of Physics, Faculty of Electrical Engineering and Computer Science, VSB Technical University of Ostrava)

19:30 Diner at “La Mère Poulard” restaurant

Thursday, October 12th

09:00 *Search for ^{22}Na in novae supported by a novel method for measuring lifetimes*
François de Oliveira Santos (GANIL)

09:20 [Experimental nucleosynthesis studies at ALTO](#)
Nicolas de Séréville (IJC Lab, Orsay)

Instrumentation and facilities

Chairperson: Xavier Ledoux

09:50 NFS
Xavier Ledoux (GANIL)

10:20 NIFFLER - Facility for Neutron Imaging at Training Reactor VR-1
Jana Matouskova (Czech Technical University in Prague, winner of the Becquerel prize)

10:40 Coffee break

11:10 [Czech accelerator mass spectrometry laboratory and its integration to European nuclear education network](#)
Jan Kamenik (NPI)

11:30 Technology transfer based on cooperation of the Czech Republic and LSM, France
Ivan Stekl (Institute of Experimental and Applied Physics, Czech Technical University)

11:50 Activities of IEAP CTU in Prague within SuperNEMO collaboration
Miroslav Macko (Institute of Experimental and Applied Physics, CTU)

12:10 Lunch at “Le Relais Saint Michel” restaurant

14:00 Transport from Mont Saint Michel to GANIL (bus)

16:00 Discussion panels/working groups and Wrap-up session (Guest house at GANIL)

18:00 NuAG Collaboration meeting

19:00 Banquet at the GANIL guest house