

Kickoff meeting of the CNRS-MSU International Research Laboratory on Nuclear Physics and Nuclear Astrophysics



Report of Contributions

Contribution ID: 1

Type: **not specified**

Nuclear dynamics and thermodynamics with INDRA and FAZIA

Monday, December 11, 2023 9:10 AM (25 minutes)

Presenter: Dr GRUYER, Diego (LPC Caen)

Session Classification: Nuclear structure and reactions from stability to rare isotopes

Contribution ID: 2

Type: **not specified**

Insights of shell evolution, magicity, superfluidity and mirror symmetry

Monday, December 11, 2023 9:35 AM (25 minutes)

Presenter: Dr SORLIN, Olivier (GANIL)

Session Classification: Nuclear structure and reactions from stability to rare isotopes

Contribution ID: 3

Type: **not specified**

Fission studies in inverse kinematics: opportunities and perspectives

Monday, December 11, 2023 10:00 AM (25 minutes)

Presenter: Dr LEMASSON, Antoine (GANIL / CNRS UPR3266)

Session Classification: Nuclear structure and reactions from stability to rare isotopes

Contribution ID: 4

Type: **not specified**

Investigating neutron halo nuclei using Coulomb breakup at FRIB

Monday, December 11, 2023 11:20 AM (25 minutes)

Presenter: Prof. REVEL, Aldric (NSCL)

Session Classification: Nuclear structure and reactions from stability to rare isotopes

Contribution ID: 5

Type: **not specified**

Laser spectroscopy experiments at FRIB for nuclear structure studies

Monday, December 11, 2023 10:55 AM (25 minutes)

Presenter: Dr MINAMISONO, Kei (NSCL/MSU)

Session Classification: Nuclear structure and reactions from stability to rare isotopes

Contribution ID: 6

Type: **not specified**

Spectroscopy and Lifetime Measurements at FRIB

Monday, December 11, 2023 11:45 AM (25 minutes)

Presenter: Prof. IWASAKI, Hiro (NSCL/MSU)

Session Classification: Nuclear structure and reactions from stability to rare isotopes

Contribution ID: 7

Type: **not specified**

Probing the equation of state of Neutron Stars with heavy ion collisions

Monday, December 11, 2023 12:10 PM (25 minutes)

Presenter: Prof. CHAJECKI, Zbigniew (WMU Kalamazoo)

Session Classification: Nuclear structure and reactions from stability to rare isotopes

Contribution ID: 8

Type: **not specified**

Recently investigated open questions in nucleosynthesis, perspectives at FRIB

Monday, December 11, 2023 2:00 PM (25 minutes)

Presenter: Dr HAMMACHE, Fairouz (IPN-Orsay)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 9

Type: **not specified**

Recent results on the carbon burning at stellar energies and perspectives within the ChETEC-INFRA network

Monday, December 11, 2023 2:25 PM (25 minutes)

Presenter: Prof. COURTIN, Sandrine (IPHC and UDS)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 10

Type: **not specified**

Probing the properties of dense matter with neutron stars

Monday, December 11, 2023 2:50 PM (25 minutes)

Presenter: Dr FANTINA, Anthea ({CNRS}UPR3266)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 11

Type: **not specified**

Nuclear Astrophysics at FRIB

Monday, December 11, 2023 3:45 PM (25 minutes)

Presenter: Prof. SCHATZ, Hendrik (FRIB)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 12

Type: **not specified**

Probing stellar explosion using SECAR

Monday, December 11, 2023 4:10 PM (25 minutes)

Presenter: Dr MONTES, Fernando (FRIB)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 13

Type: **not specified**

Terrestrial messengers for nuclear equation of state

Monday, December 11, 2023 4:35 PM (25 minutes)

Presenter: Prof. TSANG, Betty (NSCL/Michigan State University)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 14

Type: **not specified**

Recent advances on quantum computing nuclear physics @ Orsay

Tuesday, December 12, 2023 9:00 AM (25 minutes)

Presenter: Dr LACROIX, Denis (Institut de Physique Nucléaire)

Session Classification: Nuclear theory for finite systems and uniform matter

Contribution ID: 15

Type: **not specified**

Three body forces revealed in strongly deformed nuclei

Tuesday, December 12, 2023 9:25 AM (25 minutes)

Presenter: Dr NOWACKI, Frederic (IPHC Strasbourg)

Session Classification: Nuclear theory for finite systems and uniform matter

Contribution ID: 16

Type: **not specified**

Nuclear structure at scission

Tuesday, December 12, 2023 9:50 AM (25 minutes)

Presenter: Dr SCAMPS, Guillaume (L2i Toulouse, CNRS/IN2P3, UT3)

Session Classification: Nuclear theory for finite systems and uniform matter

Contribution ID: 17

Type: **not specified**

Microscopic effective interactions for the nuclear shell model

Tuesday, December 12, 2023 10:15 AM (25 minutes)

Presenter: Prof. SMIRNOVA, Nadezda (Laboratoire de Physique des Deux Infinis Bordeaux)

Session Classification: Nuclear theory for finite systems and uniform matter

Contribution ID: **18**

Type: **not specified**

Nuclear Lattice Simulations for Nuclear Structure

Tuesday, December 12, 2023 11:10 AM (25 minutes)

Presenter: Prof. LEE, Dean (FRIB)

Session Classification: Nuclear theory for finite systems and uniform matter

Contribution ID: 19

Type: **not specified**

Selected recent developments in reaction theory

Tuesday, December 12, 2023 11:35 AM (25 minutes)

Presenter: Prof. HEBBORN, Chloe (FRIB)

Session Classification: Nuclear theory for finite systems and uniform matter

Contribution ID: 20

Type: **not specified**

Progress in Ab Initio Methods for Open-Shell Nuclei

Tuesday, December 12, 2023 12:00 PM (25 minutes)

Presenter: Prof. HERGERT, Heiko (NSCL/FRIB Laboratory, Michigan State University)

Session Classification: Nuclear theory for finite systems and uniform matter

Contribution ID: 21

Type: **not specified**

Physics of extreme nuclei and extreme nuclear states

Tuesday, December 12, 2023 12:25 PM (25 minutes)

Presenter: Prof. NAZAREWICZ, Witold (FRIB)

Session Classification: Nuclear theory for finite systems and uniform matter

Contribution ID: 22

Type: **not specified**

TBA

Presenter: Prof. BAZIN, Daniel (Michigan State University)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

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TBA

Contribution ID: 23

Type: **not specified**

TBA

Presenter: Prof. LEACH, Kyle (Colorado School of Mines)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 24

Type: **not specified**

TBA

Presenter: Prof. MINAMISONO, Kei (NSCL/MSU)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 25

Type: **not specified**

TBA

Presenter: Prof. VILLARI, Antonio (FRIB)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 26

Type: **not specified**

TBA

Presenter: Dr SAVAJOLS, Hervé (GANIL/CNRS)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 27

Type: **not specified**

TBA

Presenter: Dr DUBOIS, Mickael (GANIL - CNRS)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 28

Type: **not specified**

TBA

Presenter: Dr GIRARD-ALCINDOR, Valérian (IJCLAB)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: 29

Type: **not specified**

TBA

Presenter: Dr MATTA, Adrien (LPC Caen, CNRS-IN2P3)

Session Classification: Nuclear astrophysics from nuclear reactions in the cosmos to extreme-matter equation of state

Contribution ID: **30**

Type: **not specified**

Active targets and spectrometers

Tuesday, December 12, 2023 2:00 PM (25 minutes)

Primary author: Dr BAZIN, Daniel (Michigan State University)

Presenter: Dr BAZIN, Daniel (Michigan State University)

Session Classification: Instrumental developments of common interest for GANIL and FRIB

Contribution ID: 31

Type: **not specified**

SALER@FRIB: Quantum Sensor Array for eV-Scale Spectroscopy with Short-Lived RIBs

Tuesday, December 12, 2023 2:25 PM (25 minutes)

Presenter: Prof. LEACH, Kyle (Colorado School of Mines)

Session Classification: Instrumental developments of common interest for GANIL and FRIB

Contribution ID: 32

Type: **not specified**

Near-barrier reactions at FRIB

Tuesday, December 12, 2023 2:50 PM (25 minutes)

Presenter: Prof. BROWN, Kyle (FRIB)

Session Classification: Instrumental developments of common interest for GANIL and FRIB

Contribution ID: 33

Type: **not specified**

BMIS+: Precursor of a Solid Stopper in FRIB

Tuesday, December 12, 2023 3:15 PM (25 minutes)

Presenter: Dr VILLARI, Antonio (FRIB)

Session Classification: Instrumental developments of common interest for GANIL and FRIB

Contribution ID: **34**

Type: **not specified**

GANIL-SPIRAL2 Instrumentation

Tuesday, December 12, 2023 4:10 PM (25 minutes)

Presenter: Dr SAVAJOLS, Hervé (GANIL/CNRS)

Session Classification: Instrumental developments of common interest for GANIL and FRIB

Contribution ID: 35

Type: **not specified**

Production of radioactive beams at SPIRAL1 and future developments

Tuesday, December 12, 2023 4:35 PM (25 minutes)

Presenter: Dr DUBOIS, Mickael (GANIL - CNRS)

Session Classification: Instrumental developments of common interest for GANIL and FRIB

Contribution ID: 36

Type: **not specified**

Overview and performances of the MUGAST array at GANIL

Tuesday, December 12, 2023 5:00 PM (25 minutes)

Presenter: Dr GIRARD-ALCINDOR, Valérian (IJCLAB)

Session Classification: Instrumental developments of common interest for GANIL and FRIB

Contribution ID: 37

Type: **not specified**

GRIT: challenges of integrated detector system

Tuesday, December 12, 2023 5:25 PM (25 minutes)

Presenter: Dr MATTA, Adrien (LPC Caen, CNRS-IN2P3)

Session Classification: Instrumental developments of common interest for GANIL and FRIB