

Erasmus Mundus Master in Nuclear Physics

Master Thesis 2020

University of SEVILLA

Friday, 30th September

Student: Bharat MISHRA

Title: *Modelling Nuclear β -Decays in NLTE ECR Plasmas Confined in Compact Magnetic Traps*

Supervisors: Prof. José Manuel Q UESADA MOLINA (US), Prof. Alberto MENGONI, Dr. David MASCALI, Dr. Angelo P IDATELLA (INFN-LNS)

Friday, 18th September

Student: Praveen Jodidar

Title: *Study of Shape Phase Transition via Two Nucleon Transfer Reaction*

Supervisors: Prof. Andrea Vitturi (U. Padova) and Prof. J. A. Lay Valera (US)

Friday, 25th September

Student: Patricia Pérez

Title: *Characterisation of novel digital gamma spectrometry system for dismantling, decommissioning and environmental applications*

Supervisors: Prof. Marcos A.G. Álvarez (US), Erica Fanchini, and Massimo Morichi (CAEN SpA)

Friday, 25th September

Student: José Rueda

Title: *Design and implementation of an imaging neutral particle analyser at the ASDEX Upgrade tokamak*

Supervisors: Eleonora Viezzer (US) and Manuel García-Muñoz (US)

Friday, 25th September

Student: Pablo Oyola

Title: *Characterization of edge toroidal Alfvén eigenmodes*

Supervisors: Eleonora Viezzer (US) and Manuel García-Muñoz (US)

University of BARCELONA

Wednesday, 23rd September, 10:00

Student: José Pablo Linares Fernández

Title: *Analysis of the nuclear matrix elements of double-beta decay in terms of the spin-isospin $SU(4)$ symmetry*

Tutor: Javier Menéndez (UB)

Wednesday, 23rd September, 11:30

student: Hristijan Kochankovski

Title: *Properties of neutrons stars with exotic components studied within an analytic parametrization of the equation of state*

Tutors: Angels Ramos (UB), Isaac Vidaña (INFN, Catania)

University AUTÓNOMA DE MADRID

Monday, 16th September,

Student: Hope DONGLO

Title: *Nuclear Structure studies with symmetry conserving configuration mixing methods*

Tutors: Tomás Rodríguez Frutos (UAM)

University COMPLUTENSE DE MADRID

Monday, 21st September,

Student: Hoa Thi DINH

Title: *NUCLEAR EFFECTS IN ENERGY RECONSTRUCTION FOR NEUTRINO OSCILLATION EXPERIMENTS*

Tutors: José M. Udias and Raul González (UCM)

Monday, 21st September,

Student: Sergio MINGO BARBA

Title: *ELIMED project - First dosimetric and radiobiological measured with laser-accelerated ion beams*

Tutors: Paolo Cirrone (INFN/LNS)

Monday, 14 th September,

Student: Pinelopi CHISTODOULOU

Title: *AN IN SITU GAMMA-SPECTROMETRY SYSTEM FOR THE CHARACTERIZATION OF NON-CONVENTIONAL RADIONUCLIDES FOR MEDICAL RESEARCH*

Tutors: Luis M. Fraile (UCM) and CHARLOTTE DUCHEMIN (CERN)

September, (Did not finish his MASTER THESIS in September 2020)

Student: Benedic Zambales CASTRO

University of CATANIA

October, 5th 2020

Student: Iftikhar Ahmad

Title: *Characterization of the response of a liquid argon double-phase Time Projection Chamber (TPC) within the Recoil Directionality (ReD) project at LNS-INFN, Catania.*

Tutors: Prof. Sebastiano Albergo and Dr. Luciano Pandola (UniCT-INFN)

October, 5th, 2020

Student: Vlada Yevarouskaya

Title: *STUDIES OF THE LOW ν METHOD WITH THE SAND NEAR DETECTOR OF THE DUNE EXPERIMENT*

Tutors: Prof. Silvio Cherubini, Dr. Carla Distefano, Dr. Piera Sapienza (UniCT-INFN)

October, 5th, 2020

Student: Aliaa Abdelnasser Madbouly AFIFY

Title: *KM3NET Time Calibration*

Tutors: Prof. Silvio Cherubini, Dr. Rosa Coniglione, Dr. Giorgio Riccobene,(UniCT-INFN)

October, 5th, 2020

Student: Adriana Simancas Di Filippo

Title: *RESEARCH AND DEVELOPMENT OF A NEW MODULAR DEVICE FOR CHARGED PARTICLE AND NEUTRON DETECTION WITH HIGH ANGULAR RESOLUTION*

Tutors: Prof. Giuseppe Politi, Dr. Emanuele Pagano (UniCT-INFN)

University of PADOVA

December 2020

Student: Tania MARTÍNEZ CORTÉS

Title: *Measurement of Σ c baryon production in proton-proton and proton-Pb collisions at the LHC with ALICE*

Tutors: Prof./Dr. Marcello Lunardon and Dr. Andrea Rossi (UniPD-INFN)

September, 24th, 2020

Student: Julgen PELLUMAJ

Title: *Lifetimes measurement in the $f_7/2$ shell using the AGATA spectrometer*

Tutors: Francesco Recchia and Rafael Escudeiro (LNL, Padova)

September, 24th, 2020

Student: Wenling DONG

Title: *Lifetimes measurements in neutron-deficient 105In and 104Cd isotopes with the plunger technique*

Tutors: Dr. Andrea Gottardo and Dr. Francesco Recchia (UniPD-INFN)

**ERASMUS MUNDUS MASTER DEGREE IN NUCLEAR PHYSICS
second intake (2018-2020)**

SUMMARY in DECEMBER 2020

TOTAL number of students enrolled: 19

TOTAL number of students that got the Master Degree in 2020: 18

There is one student who did not pass 3 subjects of the Master and did not present the Master Thesis

Out of the 18 student who have finished the Master Degree, 16 have already a contract for doing the PhD in different countries (Italy 2, France 6, Spain 2, Czech Republic 1, Poland 1, Canada 1, Germany 1, Switzerland 1, FYROM (Macedonia) 1) and the rest (2) are actively looking for a PhD grant.

FINISH

Already with a contract for PhD

Bharat MISHRA (applications)

Patricia Pérez (applications)

José Rueda (applications)

Pablo Oyola (theory)

José P. Linares (theory)

Hoa Thi DINH (theory)

Pinelopi CHISTODOULOU (applications)

Iftikhar Ahmad (experimental)

Vlada Yevarouskaya (experimental)

Aliaa Abdelnasser Madbouly AFIFY (experimental)

Adriana Simancas Di Filippo (experimental)

Julgen PELLUMAJ (experimental)

Wenling DONG (experimental)

Hristijan Kochankovski (theory)

Sergio Mingo (applications) (Marie Curie PhD grant)

Hope Donglo (theory)

Looking for a job/contract

Praveen Jodidar (theory)

Tania Martínez (experimental)