Erasmus Mundus Master Degree in Nuclear Physics
Academic Year 2021-2022

Selection of Master Thesis Proposals

Surname	Name	Title	Tutors	University
Ahmad	Osama	Study for a toolbox probes for UGV platform in D&D operations	Sandra Moretto	Padova
Angelini	Filippo	Commissioning of the gamma-ray tracking array	J.J. Valiente-Debon and Rosa Perez	Padova
Axness Ferrando	Marvin Pau	Study of the 16O(p,gamma)17F underground at LUNA	Antonio Caciolli	Padova
Babu	Harshith	Measurement of charm-baryon production in proton-proton, proton-Pb and Pb-Pb collisions at the LHC with ALICE	Marcello Lunardon, and Andrea Rossi	Padova
Balasmeh	Yazeed Mohammad	Development of an X-ray detection system for particle ID of superheavy nuclei	Julien Piot	Caen
Bui	My Hoang Hoa	3-dimensional scintillation dosimetry for small irradiation fields control in protontherapy	Anne-Marie Frelin	Caen GANIL
Chung	Gyang Davou	Precision measurement of the Fierz term in 6He decay	O. Naviliat-Cuncic and X. Fléchard:	Caen
Cocha Toapaxi	Carlos Eduardo	Study of b- and c-jet identification with quantum machine learning algorithms and application to the H reconstruction at LHCb.	Donatella Luchessi and Lorenzo Sestini	Padova
Covalam Vijayakumar	Nithish Kumar	Structure of single-Λ hypernuclei	Luis Robledo Isaac Vidaña Stefano Romano	Catania-UAM (Madrid)
Delille	Hugo Vincent	Study of the Hoyle state band in 12C via inelastic excitations	J.A. Lay, J. Casal, and Elena Geraci	Catania-Sevilla

Khaliq	Ahmar	Simulation of neutron inspection techniques based on the laser plasma neutron beam and first experiments with a Cf source	Sandra Moretto and Felix Pino	Padova
Nasr	Omar Hesham Mohamed	Detector and readout studies (experimental tests and simulation) for neutron and gamma detection	Sandra Moretto	Padova
Nguyen	Thi Thao Vy	Ion collision induced fragmentation of water clusters	Patrick Rousseau	Caen
Okolinta	Chimnaeme rem Godwin	Optimizing FLASH-proton radiation therapy	Miguel A. Cortés and Alejandro Bertolet	Sevilla
O' Reilly	David Francis	Machine-learning for radiotherapy quality assurance of clinical trials (cRTQA)	Juliette Thariat	Caen
Pilotto	Elia	In-beam commissioning of the AGATA Tracking array with ancillary instrumentation	D. Mengoni and Franco Galtarossa	Padova
Sanjinez Ortiz	Monica Alejandra	Hyperonic stars within alternative theories of gravity	Stefano Romano Isaac Vidaña Laura Tolos	Catania-Barcelona
Stefanescu Miralles	Gica	Radioactive Disequilibria in Volcanic Plumes	Stefano Romano and Giuseppe Rapisarda	Catania