

(more information by clicking on the PhD subject)

speciality	N°Réf.	Subject	keywords	ED	Thesis supervisor	Filled
Accelerator physics	59989	Development of innovative systems for the real-time control and operation of the superconducting cavities in the PERLE project.	Superconducting cavities, LLRF, Simulator, Embedded system, PERLE, ERL	PHENIICS	STOCCHI Achille	
Astroparticle Science and Cosmology	59568	Time-domain astronomy with the COMCUBE-S gamma-ray mission	astroparticules, mission spatiale, astronomie gamma, sursaut gamma, intelligence artificielle, CubeSat	PHENIICS	TATISCHEFF Vincent	
Astroparticle Science and Cosmology	59704	Commissioning and characterization of variable finesse filter cavities for squeezing application in gravitational-wave detectors.	Squeezing, Gravitational-wave detectors, Optical cavity, Variable finesse	PHENIICS	LARTAUX Angélique	
Astroparticle Science and Cosmology	59910	From slitless spectrophotometry to the equation of state for dark energy with the StarDICE and LSST experiments	cosmology, dark energy	PHENIICS	NEVEU Jérémy	

Astroparticle Science and Cosmology	60152	GRANDMA, Vera Rubin and High Energy Astrophysical transient events	transient sky, data science, compact objects, kilonova	PHENIICS	HELLO Patrice
Astroparticle Science and Cosmology	60238	Dark Matter and Hidden Sector U(1): The DAMIC-M Experiment	Dark Matter, Skipper CCD, astroparticle, cosmology, direct search	PHENIICS	BERTOUCHE Xavier
Astroparticle Science and Cosmology	60659	Chasing gamma rays and neutrinos at EeV energies with the Pierre Auger Observatory	ultra-high energy cosmic rays, photons and neutrinos, sources and propagation of cosmic rays, extensive air showers, super heavy dark matter, cosmic strings	PHENIICS	DELIGNY Olivier
Instrumentation physics	59496	Machine learning algorithms for the analysis of time-of-flight mass spectra with a gold nanoparticle probe: Classification, quantification and identification of complex compounds.	Ion-Matter Interaction, Mass Spectrometry, Surface Analysis, Artificial Intelligence, Deep Learning, Simulation	PHENIICS	NAIMI Sarah

Instrumentation
physics

60058

[Direct dark matter detection based on innovative cryogenic devices for the TESSERACT project](#)

Ge cryogenic detectors,
Dark matter

PHENIICS

MARNIEROS Stefanos

Instrumentation
physics

60583

[Study of chlorine-containing elpasolite crystals for neutron and gamma spectroscopy](#)

Neutron spectroscopy,
Gamma spectroscopy,
Neutron-gamma
discrimination, Calorimetry

PHENIICS

DELAFOSSE Clément

Instrumentation
physics

60685

[Feasibility Study of Electron Scattering on Rare Isotopes at the PERLE Facility](#)

Electron scattering, rare
isotopes, PERLE,
numerical simulation, ion
traps

PHENIICS

NAIMI Sarah

Medical imaging
physics

55652

[Development and implementation of ion beam monitoring tools for the BioALTO preclinical irradiation platform](#)

Beam monitoring,
Dosimetry, Pré-clinical
irradiation platform,
Nuclear Instrumentation,
hadrontherapy

PHENIICS

LANIECE Philippe

Material science	59648	Understanding cavity swelling under irradiation in advanced vanadium alloys	irradiation, vanadium, MET	PHENIICS	GENTILS Aurélie
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Nuclear Astrophysics	59677	Quasiparticle properties in neutron-star matter	neutron stars, ab-initio approach, effective mass, Landau parameters	PHENIICS	URBAN Michael
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Nuclear Physics	59242	Lifetimes of excited states in neutron-rich copper isotopes	gamma spectroscopy, nuclear structure, exotic nuclei	PHENIICS	FRANCHOO Serge
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Nuclear Physics	59260	Does tetraneutron, a 4 neutron nucleus, exist ? Search for its isobaric analog state in 4H	nuclear structure, neutral nuclei, superfluidity, direct reactions, particle gamma coincidence	PHENIICS	ASSIÉ Marlène
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Nuclear Physics	59426	Non-equilibrium dynamics in strongly entangled systems described with quantum computers	Quantum computers, Many-body problems, Quantum Information theory, atomic nuclei, Neutrinos	PHENIICS	LACROIX Denis
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Nuclear Physics	59546	Structure of heavy nuclei, SIRIUS@S3 commissioning and SIRIUS upgrade	nuclear structure, alpha, gamma, electron spectroscopy, X-ray spectroscopy, nuclear reactions	PHENIICS	LOPEZ-MARTENS Araceli
Nuclear Physics	59628	Transfer Learning Approaches Leveraging Nuclear Ab Initio Reaction Models	IA, ab initio methods, reactions	PHENIICS	HUPIN Guillaume
Nuclear Physics	59749	Taiwan: Study of Quantum Chromodynamics using Silicon Photo-Multipliers and Artificial Intelligence algorithms at the future Electron-Ion Collider	Quantum Chromodynamics, Silicon Photo-Multipliers, Artificial Intelligence	PHENIICS	MUNOZ CAMACHO Carlos
Nuclear Physics	59764	Mapping the tower of nuclear effective field theories	ab initio method, effective field theory, structure, structure	PHENIICS	VAN KOLCK Ubirajara
Nuclear Physics	59776	Systematic study of matter produced in heavy-ion collisions at few GeV energy through electromagnetic probes	hadronic matter, QCD, data analysis, dileptons	PHENIICS	RAMSTEIN Béatrice

Nuclear Physics	59996	Accelerated Adiabatic quantum computation for strongly entangled systems	Quantum computers, Many-body problems, Quantum Information theory, atomic nuclei	PHENIICS	LACROIX Denis
Nuclear Physics	60007	Study of the Heavy Fragment survival in Multi Nucleon Transfer reactions	nuclear reactions, Multi nucleons transfert , GANIL	PHENIICS	GHEORGHE IULIAN STEFAN
Nuclear Physics	60628	Investigating the dynamics of heavy-ion collisions at energies of a few GeV with baryonic resonances	data analysis, QCD, hadronic matter, baryon resonances	PHENIICS	RAMSTEIN Béatrice
Particle Physics	59175	The future electron-ion collider	Physics, Particle physics, Hadron physics, Nuclear physics, Accelerators, Colliders	PHENIICS	MUNOZ CAMACHO Carlos
Particle Physics	59396	Very high precision measurement of the photon polarization in b-> s gamma transitions with the LHCb upgraded detector	Flavoru Physics, LHC, FCNC, electron	PHENIICS	SCHUNE Marie-Hélène

Particle Physics	59471	Study of a new type of scintillating grain calorimeter for FCCee and analysis of the Lambda b -> lambda mumu decay with the LHCb detector	calorimeter, FCCee, Flavour physics, LHCb	PHENIICS	SCHUNE Marie-Hélène
Particle Physics	59476	Challenging neutrino events reconstruction in the DUNE liquid argon time projection chamber with advanced machine learning methods	Neutrino oscillation, CP symmetry violation, Advanced machine learning methods, LAr TPC detectors	PHENIICS	KERMAÏDIC Yoann
Particle Physics	59582	Measurement of the B(s)→hh decays with the LHCb experiment and participation in the development of the PicoCal detector	Flavour Physics, LHCb, LHC, Calorimetry	PHENIICS	AGAPOPOULOU Christina
Particle Physics	59683	Double charm production measurements with ALICE at the LHC	Charm, QCD, multiple parton interaction, heavy-ion collision, LHC, ALICE	PHENIICS	CONESA DEL VALLE Zaida
Particle Physics	59728	The Partonic Structure of the Nucleon	Parton Distributions, Deeply virtual compton scattering, short range correlations, EMC effect	PHENIICS	HOBALLAH Mostafa

Particle Physics	59959	The DeLLight experiment for the search of optical nonlinearity in vacuum with intense laser pulses	Quantum electrodynamics and quantum vacuum, Optical nonlinearity in vacuum, interferometry with femtosecond laser pulses, Intense laser	PHENIICS	SARAZIN Xavier
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Particle Physics	59981	Measurment of branching ratio of Bs meson with the Belle II detector	Belle II experiment, Data analysis, Phenomenology	PHENIICS	KOU Emi
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Particle Physics	60150	Search for the neutrinoless double beta decay with the SuperNEMO demonstrator	neutrinos, Majorana, leptogenesis, mass	PHENIICS	SIMARD Laurent
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Particle Physics	60925	Study of cryogenic microwave absorbers	microwave, absorbers, higher order modes, superconducting accelerator, cryogenic, material	PHENIICS	STOCCHI Achille
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Physics

59557

[Automatic alignment control for the Phase II of the Advanced Virgo gravitational-wave detector](#)

Gravitational-waves detector, Fabry-Perot cavity, Optics, Control

EDOM

LORINETTE Vincent
