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7/5/2023

N° Ref.	PhD subject	Keywords	ED	Thesis director
44749	The DeLLight experiment for the search of optical nonlinearity in vacuum with intense laser pulses	Non linear QED vacuum in intense field, Interferometric metrology with femtosecond laser pulses, Modificatio of the speed of light in vacuum with intense lasers, Deflection of light by light	PHENIICS	SARAZIN Xavier
45059	Study of Vector-Boson Scattering with the ATLAS detector and design of the High Granularity Timing Detector for HL-HLC	Electroweak interaction, Beyond the Standard Model, Machine learning, Front-end electronics, High Granularity Timing Detector, LHC ATLAS	PHENIICS	MAKOVEC NIKOLA
45061	Time resolution of a highly-granular electromagnetic calorimeter and study of electroweak processes at a Higgs factory	Higgs Factory, Electroweak physics, Time resolution, Event reconstruction, Machine Learning	PHENIICS	POESCHL Roman
45147	Fair Universe : uncertainty-aware Artificial Intelligence for ATLAS experiment Higgs boson Physics	Higgs, Machine Learning, Artificial Intelligence	PHENIICS	ROUSSEAU David GUYON isabelle
45225	Study of b-> dll transitions in b-baryons decays with the LHCb detector	LHCb, Flavour physics	PHENIICS	SCHUNE Marie-Hélène

45280	CP violation symmetry sensitivity studies of the DUNE experiment in the leptonic sector with contribution to the data analysis.	Neutrinos oscillation, CP symmetry, Matter-antimatter asymmetry, Systematics, DUNE, Data analysis	PHENIICS	KERMAÏDIC Yoann
45305	Study of Bc rare decays	Bc annihilation decays, Bc semileptonic decays	PHENIICS	BARSUK Sergey
45353	Search for Higgs boson pair production and development of the High Granularity Timing Detector with the ATLAS experiment at the LHC	ATLAS, LHC, CERN, Higgs Boson, Detector, HGTD	PHENIICS	SERIN Laurent
45859	Gravitational production in the Early Universe	Early Universe, Inflation, Dark Energy, Dark Matter, Inflaton, Reheating	PHENIICS	MAMBRINI Yann
48341	Hadronic tau decays, experimental study with Belle II detector and their phenomenology	Belle II experiment, Tau lepton, Phenomenology, Data analysis	PHENIICS	KOU Emi
49583	On-shell amplitudes and symmetries of quantum systems	Particle physics, S-matrix	PHENIICS	FALKOWSKI Adam

49619	High Precision Neutrino Physics with JUNO	neutrino oscillation physics, fundamental particle physics, first data analysis, measurements of Δm2, δm2, θ12 and θ13	PHENIICS	CABRERA Anatael

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N° Ref.	PhD subject	Keywords	ED	Thesis director
45185	Formation of triton clusters at the surface of light neutron-rich nuclei	Clustering , Light neutron-rich nuclei, Transfer reactions, Inverse kinematics, DWBA analysis	PHENIICS	BEAUMEL Didier
45267	Study of Beta decay from beam production of laser ionized Zn at ALTO	Beta deacay, Resonance laser ionisation, isotope separation, exotic nuclei, nuclear spectroscopy	PHENIICS	LE BLANC François GAULARD CAROLE

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N° Ref.	PhD subject	Keywords	ED	Thesis director
45081	Impact of temporality on uncertainties associated with Pu multi-recycling strategies with the CLASS cycle simulation code	nuclear energy, fuel cycle, simulation, uncertainties	PHENIICS	ERNOULT Marc DAVID SYLVAIN

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N° Ref.	PhD subject	Keywords	ED	Thesis director
45869	Study of neutron/gamma competition in the de-excitation process of fission fragments	gamma spectroscopy, neutron spectroscopy, GEANT4 simulations, fission process	PHENIICS	LEBOIS Matthieu
45986	Shape coexistence and octupole correlations in the light Xe, Cs, and Ba nuclei	nuclear structure, lifetimes, gamma spectroscopy, nuclear deformation, fusion-evaporation reactions	PHENIICS	ASTIER Alain PETRACHE Costel
46493	Study of shape coexistence in 134,136Nd using the beta-decay of 134,136Pm	Nuclear structure, Shape coexistence, beta-decay, gamma and electron spectroscopy	PHENIICS	ASTIER Alain PETRACHE Costel
48252	Development of innovative analysis methods for the construction of a fission trigger	nuclear physics, artificial intelligence, gamma spectroscopy, neural networks	PHENIICS	LEBOIS Matthieu
48887	Nuclear structure of exotic neutron-rich nuclei	nuclear physics, exotic nuclei, nuclear structure, spectroscopy, astrophysics, r process	PHENIICS	LOZEVA Radomira ASTIER Alain
49709	Implementation of nuclear and many-body problems on Rydberg atoms quantum computers	Theoretical Physics , Quantum Computers, Nuclear Physics, Many-Body problem	PHENIICS	LACROIX Denis SOMÀ Vittorio

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N° Ref.	PhD subject	Keywords	ED	Thesis director
45256	Study of an 'in-situ' plasma cleaning technique to improve the surface properties of accelerator components	superconductivity, radiofrequency, plasma, materials	PHENIICS	LONGUEVERGNE David SATTONNAY Gaël
45653	Conception and construction of a plasma propulsion device for space applications	Ion source, Space propulsion	PHENIICS	LEBOIS Matthieu
45963	Performance limitations due to beam-beam interactions and wakefields in high energy lepton colliders	beam-beam effect, wakefieds	PHENIICS	FAUS-GOLFE Angeles BUFF Xavier
48313	Commissioning and study of the ThomX particle accelerator's storage ring	Particle accelerator, Storage ring, Diagnostics	PHENIICS	DELERUE Nicolas
49028	Accumulation of exotic matter for fundamental science with charged particle traps	antimatter, exotic nuclides, ion trapping, beam optics	PHENIICS	LUNNEY David

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N° Ref.	PhD subject	Keywords	ED	Thesis director
44740	Ion traps for the study of the stellar nucleosynthesis	ion traps, nucleosynthesis, exotic nuclei	PHENIICS	NAIMI Sarah

(more information by clicking on the PhD subject)

N° Ref.	PhD subject	Keywords	ED	Thesis director
44747	Search for unmodeled gravitational waves for LIGO, Virgo and KAGRA detectors: application to gravitational waves from core-collapse supernovæ	gravitational waves, supernova, astrophysics	PHENIICS	LEROY Nicolas
44867	Search for unmodeled gravitational waves for LIGO, Virgo and KAGRA detectors: application to gravitational waves from core-collapse supernovæ	cosmologie, grandes structures, 21cm, radio-interferometrie	PHENIICS	PERDEREAU Olivier
45032	Data analysis and devlopment of bolometric detectors for neutrinoless double beta decay searches	neutrinos, neutrinoless double beta decay, bolometers	PHENIICS	LOAIZA Pia GIULIANI Andrea

(more information by clicking on the PhD subject)

N° Ref.	PhD subject	Keywords	ED	Thesis director
44772	Deeply virtual compton scattering	Physics, Particle physics, Hadron physics, Nuclear physics, Nucleon structure, Accelerators	PHENIICS	MUNOZ CAMACHO Carlos

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N° Ref.	PhD subject	Keywords	ED	Thesis director
45207	Cumulants and data science	Cumulants, Quantum field theory, Machine learning	PIF	RIVASSEAU Vincent
45332	Thermal and magnetotransport properties across a superconductor-insulator transition	Quantum Phase Transition, Superconductivity, Thermal transport, Disordered systems	PIF	MARRACHE Claire SENGUPTA Shamashis
46446	Non-reciprocal transport and rectification in superconducting devices	Superconductivity, Nanoelectronics	PIF	SENGUPTA Shamashis MARRACHE Claire
49070	Amplification and characterisation of optical vortices in the extreme ultraviolet range	femtosecond optics, non linear physics, optical vortices, high harmonic generation	EDOM	KAZAMIAS Sophie GUILBAUD Olivier
49503	Portable imaging system for surgical assistance in brain tumor surgery	Optical imaging, endomicroscopy, Cerebral tumor, fluorescence, spectroscopy	PIF	ABI HAIDAR Darine
50481	Reaching the precision frontier of gluonic saturation through the QCD shock-wave approach	Optical imaging, endomicroscopy, Cerebral tumor, fluorescence, spectroscopy	PIF	WALON Samuel

(more information by clicking on the PhD subject)

N° Ref.	PhD subject	Keywords	ED	Thesis director
47229	Modeling of radiobiological effects: from tumor cells to organ-on-chip; step 1.	Ionizing radiations, Cell growth, In vitro, In silicone modeling, Nanoparticles, Videoimaging	BIOSIGNE	SEKSEK Olivier PORCEL Erika

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N° Ref.	PhD subject	Keywords	ED	Thesis director
47630	Development of a LiquidO demonstrator for positron emission tomography	positron emission tomography, nuclear instrumentation, clinical imaging, Monte Carlo Simulation	PHENIICS	LANIECE Philippe VERDIER Marc-Antoine

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(more information by clicking on the PhD subject)

N° Ref.	PhD subject	Keywords	ED	Thesis director
50636	Experimental and theoretical studies of radiobiological effects induced by radio-amplifying nanoparticles on cell growth in vitro.	Ionizing radiations, Nanoparticles, Tumoral growth, In vitro, Videoimaging, Emulation computing	PHENIICS	SEKSEK Olivier PORCEL Erika