

APEL ELI-RO 2025

Projects for preparing and conducting experiments at ELI-NP/ELI-NP infrasturcture/collaboration with Germany

Cod proiect	Title	Acronym	Coordinator	Partener	Eligibil	
					DA	NU
ELI-RO/RDI/DEZ/DFG/2025_001	Advanced high power laser parameters control for optimum beam time delivery at ELI-NP	OptiLas	IFIN-HH	UNSTB	DA	
ELI-RO/RDI/DEZ/DFG/2025_002	Development of Dual Gamma and Neutron beams for the characterization of nuclear waste	DUGAN	IFIN-HH	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_003	Laser-Driven Zero-Knowledge Authentication for Secure Object Verification in Nondestructive Testing	LZK4NDT@ELI	IFIN-HH	UNSTPB	DA	
ELI-RO/RDI/DEZ/DFG/2025_004	Materials activation analysis for mixed pulsed fields experiments	MAA-MPF	IFIN-HH	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_005	New nuclear phenomena under the intense regime	NUIR	IFIN-HH	-	DA, condiționat de refacerea Declarației D3 – Declarație de nefinanțare din alte fonduri publice (indreptare eroare materială finanțator, dacă proiectul este propus la finanțare)	
ELI-RO/RDI/DEZ/DFG/2025_006	Neutron generation from deuteron-doped structured targets	NEUGEN	IFIN-HH	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_007	Ultrahigh-charge electron beams accelerated by laser-irradiated solid surface followed by a gas jet LWFA as the second stage	UHCE-Surf+LWFA	INFLPR	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_008	Role of high-density Electronic excitations on radiation effects and defect Evolution on Laser-active crystals	REEL	IFIN-HH	INCDFM	DA	

ELI-RO/RDI/DEZ/DFG/2025_009	ELIGANT-TN upgrade for improved background rejection and preparatory experiments	GANT-TN-UPGRADE	IFIN-HH	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_010	Development of Advanced Detector Systems and AI-assisted Simulation Frameworks for QED Studies in Laser-Driven Experiments	ADAQS	ISS	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_011	Radiation Dominated Plasma Dynamics: Particle Acceleration and Nuclear Phenomena	RDPD	IFIN-HH	-	DA, condiționat de refacerea Declarației D3 – Declarație de nefinanțare din alte fonduri publice (indreptare eroare materială finanțator, dacă proiectul este propus la finanțare)	
ELI-RO/RDI/DEZ/DFG/2025_012	Mitochondrial DNA zapping with tuneable ultra-high dose-rate rate FLASH-Redefining Radiobiological Frontiers	MITOZAP	IFIN-HH	INCDVB	DA	
ELI-RO/RDI/DEZ/DFG/2025_013	International Advanced Training Program in Nuclear Photonics 2.0	IATP-NP 2.0	UNSTPB	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_014	STANDARDS-based Radiation Dosimetry for Ultra-reliable Space Technologies Bridging the gap between device level testing and in-orbit performance	STARDUST	IFIN-HH	MAZAROM	DA	
ELI-RO/RDI/DEZ/DFG/2025_015	Complex Phase Shaping of Ultra-High Intensity Laser Beams for Secondary Radiation Generation and Applications	Complexa	IFIN-HH	INFLPR	DA, condiționat de refacerea Declarației D3 – Declarație de nefinanțare din alte fonduri publice (indreptare eroare materială finanțator, dacă proiectul este propus la finanțare)	
ELI-RO/RDI/DEZ/DFG/2025_016	Rezoluție spectrală în lumina extremă	ResLex	IFIN-HH	UNSTPB	DA	

ELI-RO/RDI/DEZ/DFG/2025_017	Dose and dose rate dependence of the radiobiological “FLASH effect” at ultra-high dose rate studied for laser-driven and conventional accelerated particle beams	ParticleFLASH	IFIN-HH	UNSTPB	DA	
ELI-RO/RDI/DEZ/DFG/2025_018	Innovative coating materials for optical components in extreme environments	INCOMAT	IFIN-HH	INCDFM/UB	DA	
ELI-RO/RDI/DEZ/DFG/2025_019	Microscopic investigations of nuclear excitations up to GDR energies for the prediction of new experiments	NSTAR	IFIN-HH	-	DA, condiționat de refacerea Declarației D3 – Declarație de nefinanțare din alte fonduri publice (indreptare eroare materială finanțator, dacă proiectul este propus la finanțare)	
ELI-RO/RDI/DEZ/DFG/2025_020	Development of free-standing low-density foam targets for ELI-NP experiments	ELIFOAM	INFLPR	IFIN-HH	DA	
ELI-RO/RDI/DEZ/DFG/2025_021	Study of Resonance States in Light and Medium Mass Nuclei	SOLEMN	IFIN-HH	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_022	Simulations and experiments with micro-cones	SIMECO	INFLPR	IFIN-HH	DA	
ELI-RO/RDI/DEZ/DFG/2025_023	Rapid moderation and focusing of neutrons for the new generation of laser experiments	RAMOFON	IFIN-HH	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_024	Real time detection system for flash laser-driven radiation in biological applications	BIO LIVE-FLASH	IFIN-HH	INFLPR	DA	
ELI-RO/RDI/DEZ/DFG/2025_025	Comprehensive analysis of FLASH irradiation effects on tumoral environment via high-content, label-free assays integration	FLASHTUMOR	CIB	IFIN-HH	DA	

ELI-RO/RDI/DEZ/DFG/2025_026	Exploratory nuclear studies with vortex gamma beams: generation, characterization and applications	ENSVOR	UB	IFIN-HH	DA, conditionat de refacerea Declarației D3 – Declarație de nefinanțare din alte fonduri publice (indreptare eroare materiala finanțator, dacă proiectul este propus la finanțare)	
ELI-RO/RDI/DEZ/DFG/2025_027	Laser-based Production of Low-Energy Muons for Applications	LAP-LEMA	IFIN-HH	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_028	Development of a Mach-Zehnder interferometer for the laser-induced vacuum birefringence observation	MZIVB	IFIN-HH	-	DA	
ELI-RO/RDI/DEZ/DFG/2025_029	Advanced Metrology of Intense Laser Pulses	AMIPulse	IFIN-HH	INCDTIM	DA	
ELI-RO/RDI/DEZ/DFG/2025_030	Real-time evaluation of high-power laser beams in focus	REFOCUS	UNSTPB	INFLPR	DA	
ELI-RO/RDI/DEZ/DFG/2025_031	Assessing FLASH laser-driven radiation effects on three-dimensional multicellular constructs	FLASH 3D-CELL	IFIN-HH	INCDFM	DA	
ELI-RO/RDI/DEZ/DFG/2025_032	Optimized design of 2D and 3D structured targets for ultra-intense laser-induced secondary sources used for materials in extreme environments	eTARGET	INFLPR	IMT/ ISS/IFIN-HH	DA	
ELI-RO/RDI/DEZ/DFG/2025_033	Infrastructure for testing high energy physics at ELI-NP	InTestHEP@ELI-NP	IFIN-HH	UAIC/ MGM	DA, conditionat de refacerea Declarației D3 – Declarație de nefinanțare din alte fonduri publice (indreptare eroare materiala finanțator, dacă proiectul este propus la finanțare)	