


Se aprobă,  
Ministerul Cercetării, Inovării și Digitalizării

 Bogdan-Gruia IVAN, Ministru

**Rezultatele Competiției ELI-RO 2024 / Proiecte de pregătire și realizare experimente la ELI-NP**

*Comis*

Proiecte propuse spre finanțare în cadrul bugetului alocat								
Nr. crt.	Cod proiect	Titlul proiectului	Acronim	Coordonator	Parteneri proiect	Director proiect	Punctaj obținut	Suma alocată pt 2024-2027 (în RON)
1	ELI-RO/RDI/2024_010	Understanding FLASH irradiation effect on cancer cells using laser-induced very high energy electrons and in vitro tumor-on-chip assays	FLASH CANCELLS	INFLPR	IB-AR	Felix Sima	95	4.000.000
2	ELI-RO/RDI/2024_015	Life prolongation of fs-laser mirrors through decontamination, endurance limit improvement and in situ monitoring	DELISM	INFLPR	IFIN-HH	Valentin Craciun	92	4.000.000
3	ELI-RO/RDI/2024_019	Enhanced proton acceleration in near critical density plasmas by engineering multi-layer targets and applications	HighProtonPLas	IFIN-HH	INFLPR; IMT	Catalin Mihai Ticos	92	4.000.000
4	ELI-RO/RDI/2024_008	A New Scheme for Advancing Nuclear Photonics with Multi-photon Absorption Process and High-power lasers	AMAP	IFIN-HH	-	Chieh-Jen Yang	90	2.639.545
5	ELI-RO/RDI/2024_012	High-Energy Particles and Radiation Sources / HEPaRaS	HEPaRaS	IFIN-HH	-	Sargis Ter-Avetisyan	90	4.000.000
6	ELI-RO/RDI/2024_014	A Scheme for Polyvalent Acceleration with the Peeler Regime Concept	SPARC	IFIN-HH	IMT	Paolo Tomassini	90	3.985.083

7	ELI-RO/RDI/2024_017	Pathways towards laser-neutron-induced radioplogic production and enhancement of FDA approved 177-Lu-based prostate cancer therapies supported by in-vitron essays	LaLuThe	IFIN-HH	IVB, RATEN ICN Pitesti	Klaus Spohr	90	4.000.000
8	ELI-RO/RDI/2024_021	LWFA-driven Gamma Source	LGS	IFIN-HH	-	Petru Ghenuche	90	4.000.000
9	ELI-RO/RDI/2024_026	Extreme Light Infrastructure Target Engineering	ELITE	INFLPR	IFIN-HH	Mihaela Filipescu	90	4.000.000
10	ELI-RO/RDI/2024_028	A novel laser-induced forward transfer approach for the development of mass-limited targets for ion acceleration	FLIGHT	INFLPR	IFIN-HH	Alexandra Palla-Papavlu	90	4.000.000
11	ELI-RO/RDI/2024_030	High-Power laser generated ultra-intense transient magnetic field molecular effects on leukemic and lymphomatous cancer cells	HiPoCell	INFLPR	IFIN-HH, UNSTPB	Aurelian Marcu	90	3.876.155
12	ELI-RO/RDI/2024_002	Complementary Investigations for Photon beams - High-Energy nuclear Resonant States with charged particle probes	CIPHERS	IFIN-HH	-	Pär-Anders Söderström	89	4.000.000
13	ELI-RO/RDI/2024_007	Frontier nuclear fission studies at ELI-NP	ELITE	IFIN-HH	-	Dimiter Balabanski	89	4.000.000
14	ELI-RO/RDI/2024_016	Direct laser acceleration in the multi-PW regime for electron and photon beams generation using hollow targets	DELPHI	IFIN-HH	-	Mihail Cernaianu	89	4.000.000
15	ELI-RO/RDI/2024_020	Coherent combination of high-power femtosecond laser pulses	LAS-COMB	INFLPR	IFIN-HH	Sandel Simion	89	3.999.413
16	ELI-RO/RDI/2024_039	REal-time Molecular Imaging of reactive oxygen species effects in tumoral, non-tumoral and immune cells using high-power LASer and plasma Sources In the FLASH and conventional regime	REMILASI_FLAS H	IFIN-HH	INFLPR; RTC Radiology Therapeutic Center SRL; Spitalul Colentina	Paul Vasos	89	4.000.000
							<b>TOTAL</b>	<b>62.500.196</b>
<b>Proiecte neselectate pentru finanțare (Listă rezervă)</b>								

<b>Nr. crt</b>	<b>Cod proiect</b>	<b>Titlul proiectului</b>	<b>Acronim</b>	<b>Coordonator</b>	<b>Parteneri proiect</b>	<b>Director proiect</b>	<b>Punctaj obținut</b>
17	ELI-RO/RDI/2024_040	Dose RAte Measurement and identification of biological effects in a Laser-Plasma Accelerator at ELI-NP	DRAM	IFIN-HH	UB	Ovidiu Tesileanu	88
18	ELI-RO/RDI/2024_022	Ionizing radiation-powered photodynamic therapy for targeted cancer treatment	RAY-PDT	INFLPR	IFIN-HH, UB	Angela Staicu	87
19	ELI-RO/RDI/2024_027	Three-dimensional scaffolds for assessing radiation effects on multicellular organoids at ELI-NP	SCAFFORGRAD	IFIN-HH	INFM	Mihaela Bacalum	86
20	ELI-RO/RDI/2024_034	Real-time diagnosis techniques of high-power laser focused beams	RTLFOCUS	UNSTPB	INFLPR	Mihai Stafe	86
21	ELI-RO/RDI/2024_035	Integrating hydrogel encapsulation of lung cancer cells and GEANT4 simulations for improved understanding of cellular response to radiation / HIDRO-SIM	HIDRO-SIM	IFIN-HH	UB; INFLPR	Tatiana Tozar	86
22	ELI-RO/RDI/2024_001	Positron Annihilation Techniques for Biomedical Applications	BIOPAT	IFIN-HH	IVB	Nikolay Djourellov	85
23	ELI-RO/RDI/2024_003	Development and testing of a quad detector array for dose measurements and beam diagnostics	ELI-QUADRIL	Canberra Packard SRL	UNSTPB	Radu Alin Vasilache	85
24	ELI-RO/RDI/2024_004	Femto Laser-driven Gamma Emission Optimisation for Stable Microfocus and Ultra-fast Flash Gamma Imaging Applications Development at ELI-NP	LaserGammaFlash	Accent Pro 2000 S.R.L.	IFIN-HH; INFLPR	Mihai lovea	85
25	ELI-RO/RDI/2024_005	Laser- technology Innovation exotic Materials for Sustainable Nuclear Energy	LIMS	UAIC	-	Silviu GURLUI	85
26	ELI-RO/RDI/2024_009	Deep learning enhanced nondestructive testing using laser-based neutron sources	DL4NDT@ELI	IFIN-HH	UNSTPB	Violeta Iancu	85
27	ELI-RO/RDI/2024_011	Development of compact electromagnetic calorimeters for laser-	DECALE	ISS	-	Veta Ghenescu	85

		driven experiments: novel materials and advanced computing methods					
28	ELI-RO/RDI/2024_013	Gamma above neutron threshold experiments preparation: ELIGANT-TN upgrade for improved background rejection and preparatory experiments of high precision cross section measurements for photon and alpha induced reactions on <sup>197</sup> Au	GoldStandard	IFIN-HH	-	Ioana Gheorghe	85
29	ELI-RO/RDI/2024_024	Prospective studies with twisted photons in nuclear and mesoscopic systems	TINMS	UB	IFIN-HH	Virgil Baran	85
30	ELI-RO/RDI/2024_031	Advanced Metrology of Intense Laser Pulses	AMIPulse	IFIN-HH	ITIM-CJ	Dan-Gheorghita Matei	85
31	ELI-RO/RDI/2024_038	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	Marian Zamfirescu	85
32	ELI-RO/RDI/2024_033	Development of an Assembly for the Detection and Characterization of Mixed fluxes of particles for ELI-NP	DADCM	IFIN-HH	-	Alexandra Saftoiu	83
33	ELI-RO/RDI/2024_023	Neutron response of materials for nuclear and fusion reactors	EUROPA	IFIN-HH	-	Dimitry Testov	82
34	ELI-RO/RDI/2024_036	Development of Dual Gamma and Neutron beams for the characterization of nuclear waste 2	DuGaN	IFIN-HH	-	Sophia Chen	82
35	ELI-RO/RDI/2024_006	Microscopic determination of spectral properties of nuclear excitations of different complexity and its importance in nuclear reaction	NSTAR	IFIN-HH	UB	Nadia Tsoneva	80
36	ELI-RO/RDI/2024_018	Ultrahigh-charge electron beams accelerated by laser-irradiated solid surface followed by a gas jet LWFA as the second stage	UHCE-Surf+LWFA	INFLPR	-	Constantin Diplasu	80

37	ELI-RO/RDI/2024_025	Development of a Neutron Beam Extraction and Transport System	DeNBExTraS	IFIN-HH	-	Domenico Doria	80
38	ELI-RO/RDI/2024_032	Tailored density plasma from liquid targets	TAPLIT	IFIN-HH	-	Daniel Ursescu	80
39	ELI-RO/RDI/2024_037	Development and evaluation of a vacuum/low pressure chamber for investigating high energy laser pulse Interactions with organic and inorganic films	DEVELOP-LASINT	ITIM-CJ	-	Ioan Ovidiu Pana	80
40	ELI-RO/RDI/2024_041	Reaching extreme intensities, beam pointing stability and direct laser acceleration of particles using micro-cone targets	REXINT-BPS-DLA	INFLPR	IFIN-HH; UNSTPB	Olimpia Budriga	80
41	ELI-RO/RDI/2024_029	Development and characterization of new polymeric composite targets for nuclear physics experiments	COMPACT	ISS	INFLPR; ICPE-CA; IFIN-HH	Ciprian Mihai Mitu	75

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