

Institute of Informatics & Telecommunications

DARE, DEEP & XDC Co-organized Workshop

Creating Platform-driven e-infrastructure innovation in EOSC

Welcome & Introduction

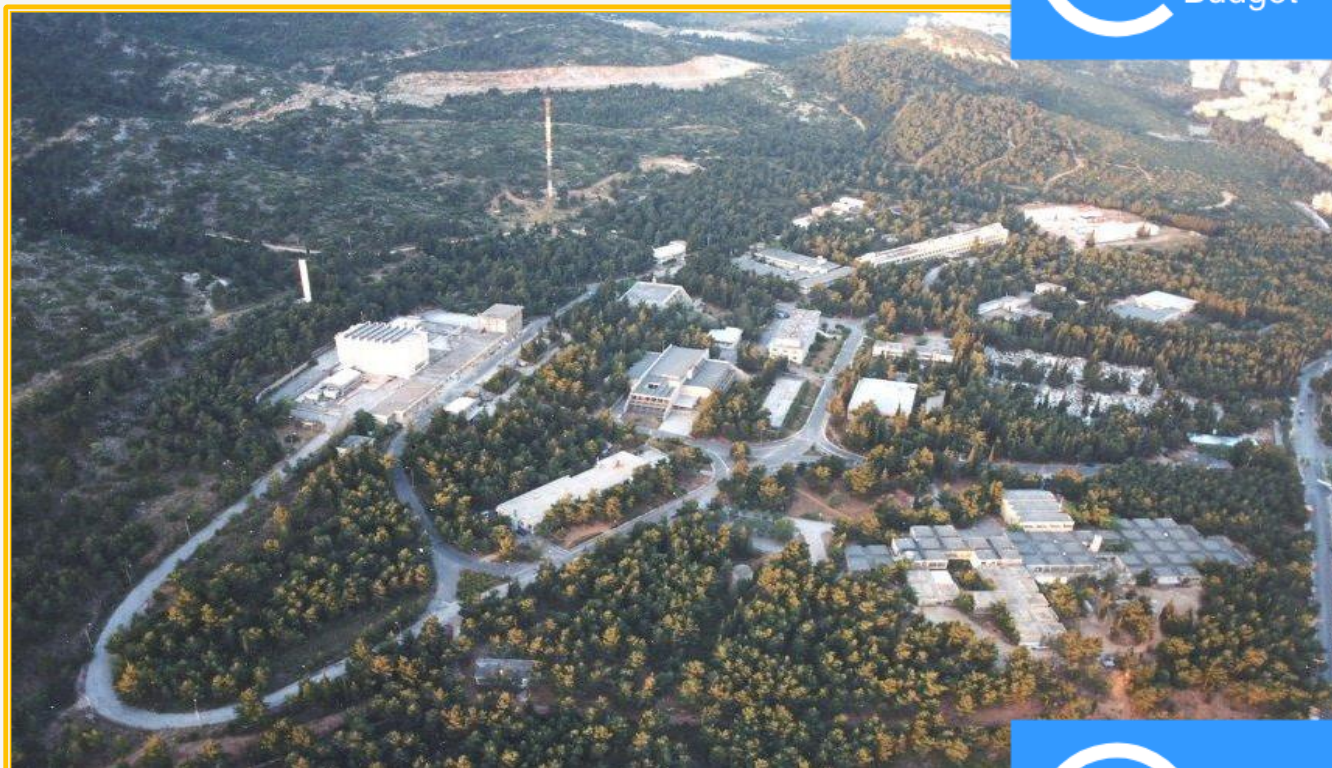
Georgios Nounesis

Director & Chairman of the Board

Vangelis Karkaletsis

IIT Director

National Centre for Scientific Research “Demokritos”



Operating
Budget

€37.1m Total Budget

€12.7m Regular Public Funding

€24.4m Research Grants
& Services



Human
Resources

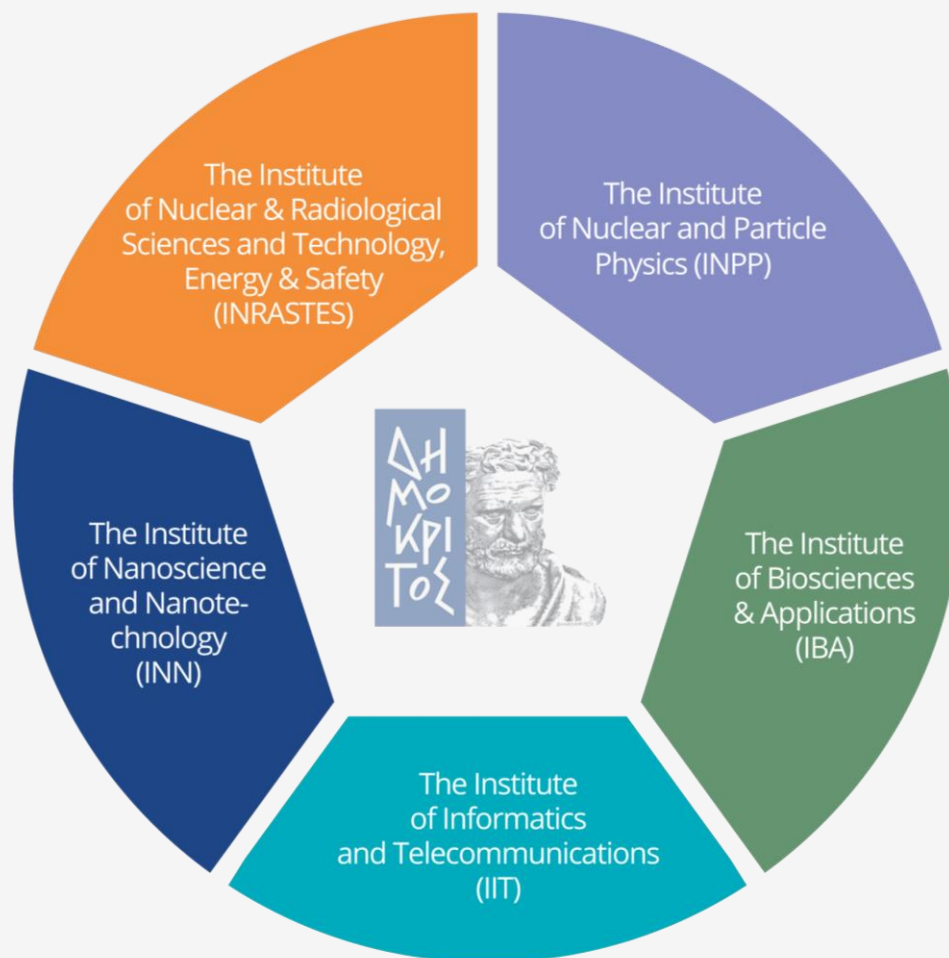
1200 Total Personnel

800 Scientific Personnel

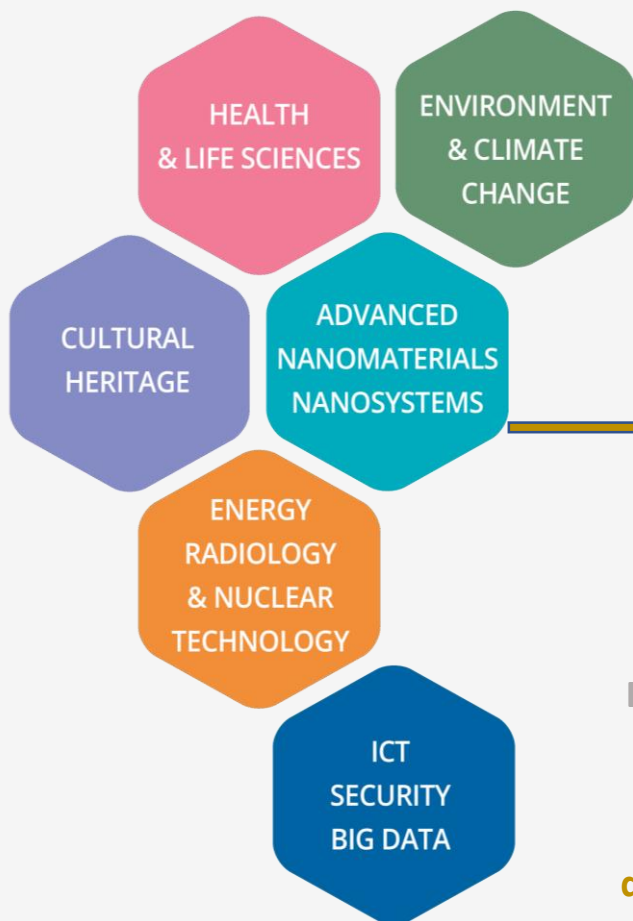
400 Administrative & Technical
Support Personnel



NCSR Institutes



National Research Infrastructures at NCSR



INNOVATION-EL

Nanotechnology, Advanced Materials and Micro/Nanoelectronics

OPEN SCREEN

Chemical Biology and Target-Based Screening for Health, Agriculture and the Environment

CALIBRA

Cluster of Accelerator Laboratories for Ion-beam Research & Applications

APOLLONIS Digital Arts, Humanities and Language Research

PROMETHEUS Integrated Energy Chain

BIOIMAGING Visualizing and Monitoring Fundamental Biological Processes

EN.I.R.I.S.S.T: Intelligent Research Infrastructure for Shipping, Supply chain, Transport & Logistics

PANACEA: Panhellenic Infrastructure for Atmospheric Composition and Climate Change

deTANet: Detector Development and Technologies for High Energy Physics

INSPIRED: Integrated Structural Biology, Drug Screening Efforts and Drug Target Functional Characterization

Institute of Informatics & Telecommunications (IIT)



Pioneer at a national level:

- Computer and network infrastructures
- Informatics services
- Artificial Intelligence
- Communication networks

Aims at advancing knowledge in the areas of telecommunications, networking, World Wide Web technologies and Intelligent Information Systems, for the benefit of the society and the knowledge economy.

IIT Identity and Distinctive Character

- Focuses on Intelligent Computing and Networking
- Invests heavily on research around Artificial Intelligence, Data Science, Augmented and Virtual Reality, 5G networks
- Is very active in the higher education landscape, participating in cross-institutional MSc programs, establishing joint PhD programs, organising seminars and summer schools
- Establishes close ties with industrial stakeholders and particularly innovative start-ups and spinoffs of Lefkippos Technology Park
- Invests significant resources to communicate the produced scientific knowledge

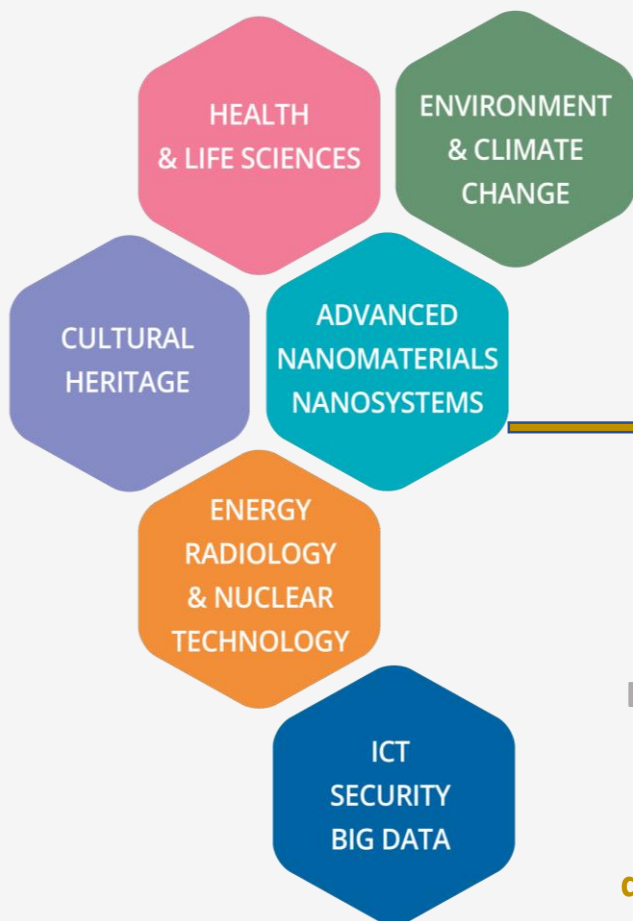
IIT acts as the epicenter of NCSR-D plan for fully embracing AI and data-driven science for its scientific activities.

NCSR and e-infrastructures

- Leadership/participation in multiple national and international projects and initiatives
- Intra-centre promotion and support of Open Science through e-infrastructure research and services



National Research Infrastructures at NCSR



INNOVATION-EL

Nanotechnology, Advanced Materials and Micro/Nanoelectronics

OPEN SCREEN

Chemical Biology and Target-Based Screening for Health, Agriculture and the Environment

CALIBRA

Cluster of Accelerator Laboratories for Ion-beam Research & Applications

APOLLONIS Digital Arts, Humanities and Language Research

PROMETHEUS Integrated Energy Chain

BIOIMAGING Visualizing and Monitoring Fundamental Biological Processes

EN.I.R.I.S.S.T: Intelligent Research Infrastructure for Shipping, Supply chain, Transport & Logistics

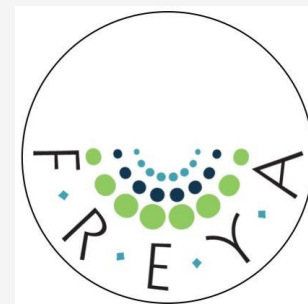
PANACEA: Panhellenic Infrastructure for Atmospheric Composition and Climate Change

deTANet: Detector Development and Technologies for High Energy Physics

INSPIRED: Integrated Structural Biology, Drug Screening Efforts and Drug Target Functional Characterization

The EINFRA-21-2017 Family

- 6 projects handling different yet interconnected aspects of an e-infrastructure solution
- harmonize and exchange solutions
- build and promote a holistic vision for European e-infrastructures
- collectively align with the goals and evolution of the EOSC vision



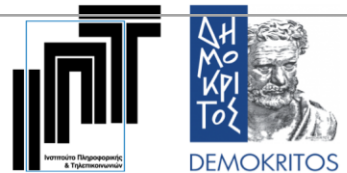
The EOSC Vision

- Layered implementation of the global vision for Open and Reproducible Science
- Long-term funding of multiple relevant projects and actions
- E-infra projects span the entire spectrum of its implementation roadmap
- They are especially critical for its technical sufficiency and sustainability
- They should adhere to the requirements and expectations of the underlying infrastructures



Workshop Agenda

09:00-09:30	Registration		
09:30-09:50	Welcome & Introduction	G. Nounesis, V. Karkaletsis	NCSR "Demokritos"
09:50-10:10	National Perspective	Agnes Spilioti	General Secretariat for Research and Technology
10:10-10:30	EOSC Status & Perspectives	Georgia Tzenou	European Commission
10:30-11:00	DARE: Delivering agile excellence on European e-infrastructures	Malcolm Atkinson	The University of Edinburgh
11:00-11:30	DEEP-Hybrid-DataCloud: intensive computing techniques for applications needing specialised hardware	Mario David	Laboratory of Instrumentation and Experimental Particle Physics (LIP)
11:30-12:00	Coffee Break		
12:00-12:30	XDC - eXtreme Data Cloud: Scalable data management services for the next generation distributed e-infrastructures	Daniele Cesini	Istituto Nazionale di Fisica Nucleare
12:30-13:00	EUXDAT: The e-Infrastructure for large data analytics in agriculture	Francisco Javier Nieto	Atos
13:00-13:30	PROCESS: Towards Exascale-ready Data Service Solutions	Maximilian Höb	Ludwig-Maximilians-Universität München



Workshop Agenda			
13:30-14:30	Lunch Break		
14:30-15:00	FREYA: Connected Open Identifiers for Discovery, Access and Use of Research Resources	Vasily Bunakov	Science and Technology Facilities Council
15:00-15:30	ExtremeEarth: AI and Big Data Techniques for Copernicus Data	Manolis Koubarakis	University of Athens
15:30-16:00	FAIR for Fusion Data-driven Research	Pär Strand	Chalmers University of Technology
16:30-16:30	Coffee Break		
16:30-17:00	Implementing Open Science in EOSC: putting the puzzle together	Natalia Manola	University of Athens
17:00-17:30	EOSC-hub: Services for the European Open Science Cloud	Kostas Koumantaros	GRNET
17:30-18:00	Open discussion & Workshop Conclusion		