



www.ifin.ro

Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering

(IFIN-HH)

30 Reactorului St., Bucharest-Magurele, jud. Ilfov, P.O.B. MG-6, RO-077125, ROMANIA
tel.: (+4) 021 404 2301, fax.: (+4) 021 457 4440
dirgen@ifin.nipne.ro

To : Prof. Dr. Gerard Mourou
Ecole Polytechnique - IZEST,
RD 128, F-91128 Palaiseau Cedex

Dear Professor Mourou,

It was our great pleasure to see the foundation of the International Zetta-Exawatt centre IZEST, one year ago, under the initiative of the ECOLE POLYTECHNIQUE and the COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES. This centre of excellence continues the efforts already started in Europe with the Extreme Light Infrastructure (ELI) project, of which our Institute is now implementing the Nuclear Physics (ELI-NP) pillar, for an entire new category of experiments investigating the radiation-matter interaction.

ELI-NP fully embraces the IZEST mission:

1. to define novel laser architectures and road map of the next generation of ultra-high peak power/Intensity lasers.
2. to facilitate the scientific and technical coordination among members of the international scientific community interested in extreme high intensity lasers. Particular attention will be devoted to:
 - prompt acceleration
 - high energy fundamental physics, physics beyond the Standard Model
 - vacuum structure
 - societal application like proton therapy, nuclear transmutation.

The pioneering research in nuclear physics with the help of ultra-intense lasers, which will be conducted at ELI-NP, as well as the development of the facility itself, will contribute to IZEST science in the following fields:

- novel sources of high energy radiations and particles,
- advances in ultra-high intensity ultra-short pulse laser technology,

- Laser in the relativistic lambda cubed regime.

IFIN-HH continuously seeks for National and European funding in the ELI-NP – IZEST common areas of interest.

IFIN-HH intends to participate, through ELI-NP representatives, at the first Participant Council that will be held at the next IZEST Conference on Laser-based High Energy Physics at Strathclyde, Scotland on Nov. 12, 2012.

Sincerely,

21.09.2012



Prof. Dr. Nicolae-Victor Zamfir
Director General, IFIN-HH
Coordinator ELI-NP Project