

ELI-Beamlines will be the high-energy, repetition-rate laser pillar of the pan-European ELI (Extreme Light Infrastructure) project. It will be an international facility for both academic and applied research, slated to provide user capability. The main objective of the ELI-Beamlines Project is delivery of ultra-short high-energy laser pulses for the generation and applications of high-brightness short pulse X-ray sources and accelerated particles.

### **Leader of Research Programme 6**

#### **Ultra-intense laser matter interaction, exotic Physics and theory**

**The suitable candidate will be responsible for the delivery of the ultra-intense laser matter interaction, exotic physics and theory programme and its integration into the ELI Beamlines facility. This will include responsibility for the following key activities:**

1. Supervision of design, development, procurement, testing and implementation of the ultra-intense laser matter interaction, exotic physics and theory research programme.
2. Implementation of ultra-intense laser plasma and vacuum interaction, exotic Physics and theory in the ELI-Beamlines project.
3. Building up the simulation capabilities including processes above  $10^{22}\text{Wcm}^{-2}$
4. Coordination of ultra-intense laser matter interaction, exotic physics and theory research and development team.
5. Coordination of interfacing between the ultra-intense laser matter interaction, exotic physics and theory research and development team and the building designers.
6. Cooperation and coordination of the development of ultra-intense laser matter interaction, exotic physics and theory team with the laser team and potential facility users.
7. Preparation and coordination of technical specifications for procurement of technology relevant to ultra-intense laser matter interaction, exotic physics and theory.
8. Responsibility for close cooperation in the field of plasma and high energy density physics development with other European research centres and commercial subjects.
9. Working closely with a team of laser scientists and control system engineers.
10. Independent scientific research and publishing, participating in conferences.
11. Implementation of the ultra-intense laser matter interaction, exotic physics and theory project with respect to deadlines, staff and technologies used.
12. Management of the research team.

**The candidates are expected to comply with the following requirements:**

1. PhD in the field of laser plasma physics, theoretical physics or high energy physics. PhD in the field of ultra-intense laser matter interaction, exotic physics and theory would be of particular asset.
2. Post-doc in the field of ultra-intense laser matter interaction, exotic physics and

theory would be a plus.

3. Working experience of minimum 5 years in the field of applications of ultra-intense laser matter interaction, exotic physics and theory with an excellent record of publications in this field in international peer-reviewed journals. Publications in high impact factor international journals are a plus.
4. Working experience in management of a large research group.
5. Excellent management and organizational skills.
6. Ability of strategic planning and visioning.
7. Team player, flexible with "can do" attitude.
8. Ability to effectively cooperate with scientists from foreign and domestic institutes.
9. Willing to travel.
10. Experience as principal investigator of scientific grants is a plus.
11. English language on a very good level (written and spoken).

Applicants should provide their CV and cover letter (in English) along with a complete list of publications. They should single out 5 most important publications with the description of their contribution.

Applicant's professional profile and experience should demonstrate their ability to scientifically lead Research Programme 6 in accordance with the ELI Whitebook.

Knowledge of at least one additional European language is a bonus.

#### **We Offer:**

1. Unique opportunity of professional development within a large pan-European research project.
2. Motivating salary package.
3. Pleasant working environment.

#### **Location**

ELI Beamlines, Institute of Physics AS CR, Prague, Czech Republic.

#### **Duration**

2-3 years renewable, possibility of extension

#### **Application process**

Applications should be sent to Mrs Mirka Svobodova ([Mirka.Svobodova@eli-beams.eu](mailto:Mirka.Svobodova@eli-beams.eu) +420733690901). Please provide two letters of recommendation specifying in detail the candidate's contribution to the relevant area. Please include the following text in your cover letter, to allow us to process your personal details:

*I agree that, according to the decree 101/2000 coll. (Czech Republic), my personal details sent to FZU AV CR, v.v.i. , Na Slovance 2, 18221 Praha 8, Czech Republic can be used for the purpose of obtaining employment and management of database of employment candidates. This permission is given for the period of one year and can be at any time withdrawn by giving a notice in writing.*

The deadline for applications is open. Candidates will be reviewed and given initial feedback within about a month and for those that pass initial review reference letters will be sought. Relevant candidates will be invited to interview by phone or videoconference, and final interviews will be held in person.