The ELI (Extreme Light Infrastructure) is a unique European project to build large research facilities. ELI-Beamlines as a cutting edge laser facility is currently being constructed in Dolní Břežany near Prague. ELI will be delivering ultra-short, ultra-intense laser pulses with extremely high peak power. It will make available laser beams over a wide range of intensities for multi-disciplinary applications in physics, medicine, biology, material science, modeling astrophysical processes under the conditions of terrestrial laboratories and fundamental sciences. With the ELI-Beamlines lasers new physics regimes when, as yet, unexplored processes come into play, will be accessed.

The HIFI (High Field Initiative) project has recently begun its work at ELI-BL. The HIFI project is established to be the leading project in the high field science. In contrast to other approaches we are emphasizing the synergy between the theory and experiments and building a strong theoretical group to develop new ideas for experiments. In parallel we are building a computing center aimed at conducting computer simulations. The project will advance our knowledge of laser accelerated electrons and ions as well as high energy photon generation in novel regimes when radiation friction and quantum electrodynamics processes, such as electron-positron pair creation and vacuum polarization, become significant. To explore this regime experimentally an upgrade of the existing at ELI-BL infrastructure around the 10 PW laser beam will be done within the HIFI project. The ERT (Excellence Research Team) recruits:

Senior Research Scientist (IV–7)

For preparing and developing of experiments on high power laser facilities, who will work with Prof. S. V. Bulanov*[)] and ELI-BL staff on**:**

- participation in design and conducting experiments for high-field sciences in ELI-Beamlines

Further questions on scientific project can be addressed to Sergei V. Bulanov (e-mail: sergei.bulanov@eli-beams.eu)

Requirements:

- PhD in Physics or Mathematics with the focus on experimental physics or equivalent degree.

Interviews will begin immediately and the position will stay open until filled.

Applications, containing CV, cover letter, contacts of references, and any other material the candidate considers relevant, should be sent to Mrs. Jana Ženíšková, HR specialist (jana.zeniskova@eli-beams.eu, +420 - 601560322).

Information regarding the personal data processing and access to the personal data at the Institute of Physics of the Czech Academy of Sciences can be found on: **https://www.fzu.cz/en/processing-of-personal-data**

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*) The ERT team leader, Prof. S. V. Bulanov has graduated from Moscow Institute of Physics and Technology (MFTI). He obtained the PhD degree from MFTI in the field of theoretical physics and astrophysics and the Doctor of Sciences degree at the Institute of General Physics RAS in Moscow in the field of plasma physics. S. V. Bulanov is an expert in theoretical astrophysics, in nonlinear wave theory, in the theory of relativistic laser plasmas and in computer simulations. S. V. Bulanov for several years has been a leader of the Laser Acceleration of Charged Particle group at the KPSI (JAERI-JAEA-QST) institute in Kyoto in Japan. S. V. Bulanov is a leader for Department 86 "Radiation Physics and Electron Acceleration" at the ELI-BL. S. V. Bulanov is a recipient of several notable awards: State Prize of the USSR for Sciences and Technology for achievements in high energy astrophysics, Japan Atomic Energy Agency President's Awards and Awards of the Japan Laser Society for contribution to the laser physics development, Hannes Alfven Prize of European Physical Society for experimental and theoretical contribution to the development of large-scale next-step devices in high-temperature plasma physics research, and the Order of Rising Sun with Golden Rays for contribution to science and technology in Japan. S. V. Bulanov published 2 monographs and about 650 papers. His citation indexes are: 17000 citations with the h-index equal to 65, according to the Thomson Reuters Web of Knowledge survey engine.