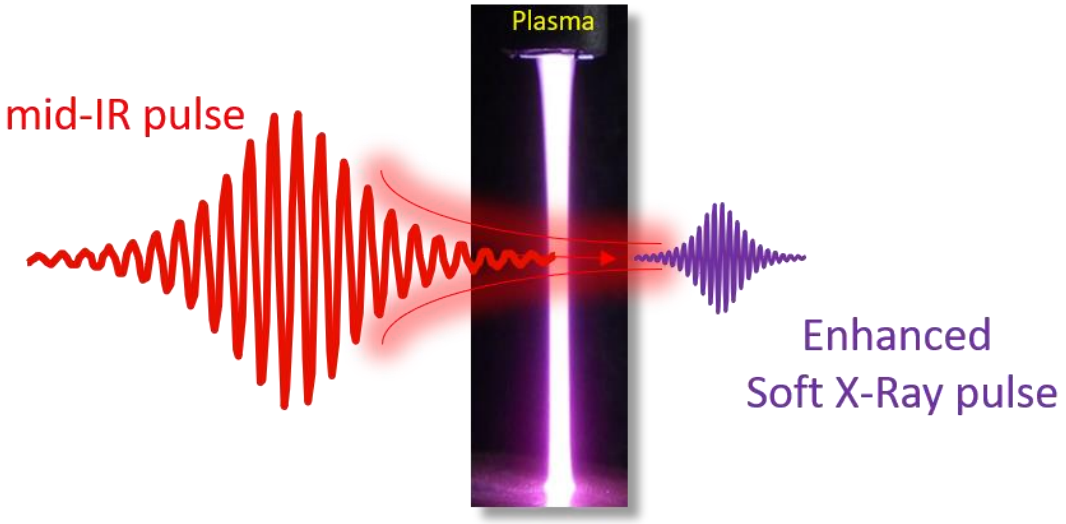
ATTOPLASMAS

Attosecond VUV-XUV-SXR Beamline for Ultrafast Spectroscopies of Electron Dynamics in Gases and Plasmas



OPPORTUNITY

for Summer Internships, Masters and PhD studies at University of Belgrade Faculty of Physics – IDEAS project

POSITIONS

We have positions open in our Masters and PhD program in our new lab for high-power laser and attosecond spectroscopy of gases and plasmas. The positions would be open unit filled.

APPLICATIONS

Application should contain a CV, Cover Letter, and at least one letter of recommendation.

CONTACT

For further info, please contact us through:
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(Dr. Predrag Ranitović)

Breakthroughs in the ultrafast-laser developments have allowed for the opening of new horizons in the ultrafast atomic, molecular and optical (AMO) physics. Following these advances, table-top extreme ultraviolet (XUV) and SXR sources have provided novel ways to achieve real-time manipulation of electron dynamics through the use of attosecond light coupled with strong laser fields, in a time-resolved manner. These techniques have been applied to materials sciences and condensed matter physics, and are becoming an essential tool in the semiconductor industry for the XUV lithography of the next generation silicon products.

With many FEL and laser institutes being built around the World, ultrafast Xray phenomena are becoming an exciting scientific field with a large potential for multidisciplinary and industrial collaborations. In our Attosecond Spectroscopy lab, table-top attosecond radiation in the VUV, XUV, and SXR spectral domain (i.e. 5 eV-300 eV), that naturally possess high time- and energy-resolution, would be used for initiating, probing and coherently controlling electron dynamics in gases and plasmas on the fastest time scales.