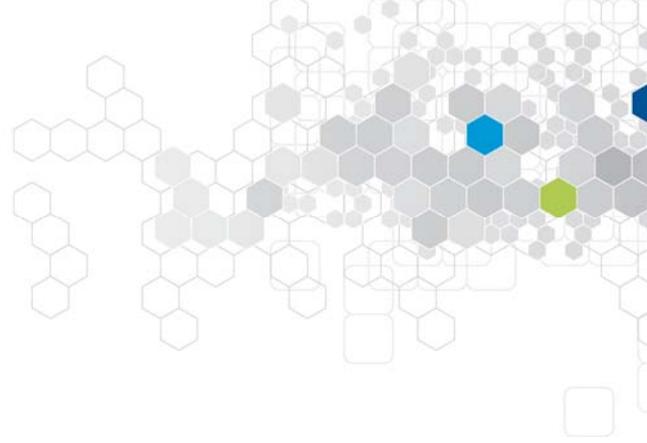


OPTICS DEPARTMENT

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OPEN POSTDOC POSITIONS

Ultrafast optics and laser materials processing

FEMTO-ST Institute, Optics Department

University of Franche-Comte and CNRS, Besancon, France

The FEMTO-ST Institute seeks highly motivated postdocs to work within several recently funded projects which aim at pushing the frontiers of laser material processing with a combined program of experimental and numerical research.

PROJECT

Ultra-intense femtosecond laser pulses promise to become a fast, universal, predictable and green tool for material processing at micro and nanometric scales. The recent tremendous increase in commercially available femtosecond laser energy at high repetition rate opens a wealth of novel perspectives for mass production. But even at high energy, laser processing remains limited to point by point removal of ultra-thin nanometric layers from the material surface. This is because the uncontrolled laser-generated free-electron plasma shields against light and prevents the reaching of extreme internal temperatures on a precise nanometric scale.

Our research aims at breaking this barrier and developing different concepts of laser material modification regimes. Several funded projects allow us developing ambitious experimental and numerical research program to push the frontiers of laser processing to unprecedented precision, speed and predictability. Our research combines ultrafast optics, beam shaping laser material processing and plasma physics.

Skilled experimentalist in ultrafast optics

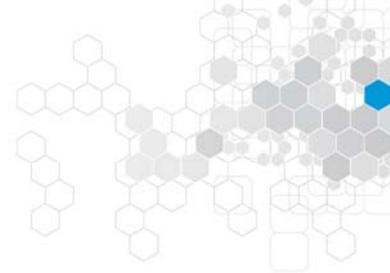
Our team seeks skilled experimentalists with knowledge of amplified femtosecond lasers and nonlinear optics and pump-probe techniques. Knowledge of beam shaping or holography would be advantageous.

An excellent level of English, both oral and written, is required.

Postdoc positions are for 1 year but renewable, and salary will depend on experience.

FEMTO-ST Institute

Research will be carried out within the CNRS FEMTO-ST Institute in a newly commissioned scientific building providing access to a wide range of basic science and technological facilities including a suite of dedicated photonics laboratories, 1300 m² of clean rooms, and parallel computing centre.



Besancon is in the East of France, 2 hours 15 minutes from Paris by train and near the foothills of the Jura mountains, close to excellent hiking and mountain bike trails, ski stations and rock-climbing formations. It is consistently rated as having one of the highest qualities of life in France and has a vibrant university atmosphere.

To apply

For more information or to apply, please contact:

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