

BENEFICIARY OF MEDEA

CEA Saclay

SCIENTISTS IN CHARGE:

- **Dr. Pascal SALIERES**
- **Dr. Bertrand CARRE**

SCIENTIFIC EXPERTISE & FACILITIES:

- Long expertise in strong-field laser-matter interaction, pioneering research in high harmonic generation and attosecond science
- Hosts ATTOLAB, a national facility for research on ultrafast dynamics in the gas and solid phase
- Member of Paris-Saclay University, gathering Orsay University, Ecole Polytechnique, Institut d'Optique...
- Member of Laserlab Europe





EARLY STAGE RESEARCHER

Christina ALEXANDRIDI

PROJECT: *Ultrafast ionization dynamics studied by photoionization and high harmonic spectroscopies*

Advanced studies of the ultrafast ionization dynamics induced either by strong-field ionization or by XUV-photon absorption:

- Hole oscillation in small molecules studied by high harmonic spectroscopy (WP3)
- Electron wavepacket dynamics induced by resonant ionization studied by photoionization spectroscopy (rainbow rabbit) (WP1)

Further studies in high harmonic spectroscopy:

- Complete characterization of the polarization state of high harmonic emission including helicity and degree of polarization using molecular polarimetry
- Signature of the electron dynamics on the structural interference occurring in the harmonic emission from diatomic molecules