

SEMINAIRE LIDYL

Vincent WANIE

*Center for Free-Electron Laser Science CFEL,
Deutsches Elektronen-Synchrotron DESY, Notkestr. 85, 22607 Hamburg, Germany.*

Le Jeudi 23 Février 2023 à 11h00
Orme des Merisiers, Bât.701, Pièce 17 (salle de séminaires)

Towards ultrafast electron and chiral dynamics in neutral molecules

Attosecond spectroscopy has opened up the possibility of observing electron dynamics in matter at their natural timescale, ranging from few-femtoseconds to tens of attoseconds. This has notably provided a route to investigate in large molecules the phenomenon of electron-driven charge migration for which, following photoexcitation, the charge density travels rapidly along the molecular structure. I will report our most recent works devoted to the investigation of charge migration and its applications to manipulate the outcome of photochemical and photophysical processes via charge-directed reactivity. With a particular interest in addressing the challenges for studying electron dynamics in neutral molecules, an overview of our few-femtosecond UV light sources will also be given.