



Monday, 23 February 2015, 14:00
CFEL Seminar Room V, O1.109 (Bldg. 99)

Vincent Kemlin

Laboratory for Optics & Biosciences, École Polytechnique, Palaiseau, France

Two-dimensional infrared Fourier spectroscopy in nonequilibrium HbCO

In this talk, I will present our latest results on two-dimensional infrared Fourier spectroscopy performed on a highly-excited non-equilibrium state resulting from coherent vibrational ladder climbing in carboxyhemoglobin.

We succeeded in exciting our system up to the $n=9$ vibrational level, which provides an invaluable "initial" nonequilibrium condition to investigate the mechanisms by which our system then relaxes to equilibrium. Two-dimensional infrared Fourier spectroscopy is perfectly suited to track the distribution and relaxation processes of the populations in the anharmonic ladder.