Free-Electron Laser Workshop "Applications of IR Free-Electron Lasers: Latest Developments and Future Directions"

Wednesday, January 17, 2018 - Saturday, January 20, 2018

Ringberg Castle

Scientific Program

Scope of the FEL Workshop

Vibrational spectroscopy based on the application of infrared radiation generated by a free-electron laser (FEL) is pursued at FEL facilities around the word. Applications include: (i) vibrational spectroscopy of clusters in the gas phase; (iii) vibrational spectroscopy of macro-molecules (e.g., peptides and small proteins); (iii) nonlinear spectroscopy of solids based on second-harmonic generation or sum-frequency generation; and (iv) surface sensitive vibrational spectroscopy of well-characterized surfaces or of metal clusters adsorbed on such surfaces. The experiments are made possible by the wide tunability, high pulse energy, and narrow spectral width of FEL radiation.

The objective of this FEL workshop is to bring together scientists in the field of infrared spectroscopy, in particular IR-FEL users, in order to stimulate the exchange of concepts and methods, and to identify future trends and possibilities. There will be 18 invited speakers. Up to 6 short "hot topic" oral presentations will be selected from the contributions. Further contributions will be presented as posters.