



Innsbruck Physics Colloquium

Atoms, Light, and Molecules at FERMI, the Italian Free Electron Laser

Carlo Callegari

Elettra Sincrotrone Trieste, Italy



Free Electron Lasers produce femtosecond soft and hard X-ray pulses with high brilliance and high coherence. FERMI is designed as a seeded Users' facility providing stable, spectrally pure pulses, tunable in the range 100–4 nm, with variable polarization and low timing jitter.

The LDM beamline at FERMI offers to the atomic-, molecular-, and cluster-physics community an endstation for photoelectron, photoion, and photon-scattering spectroscopy of supersonic jets (notably, of helium droplets). Bendable focusing mirrors allow a continuous adjustment to a focal spot below 10 μm diameter.

The fields of research covered by the beamline range from atoms in intense fields, to molecular dynamics, to electronic and nuclear dynamics in excited clusters, to coherent control of photoionization processes.

Colloquium: Tuesday, 24.10.2017

17:15 h in lecture hall C

DK-ALM Pre-Talk: 16:30 h

Gianmaria Durastante

Quantum mixture of highly magnetic atoms

Snacks will be provided in between the
pre-talk and the colloquium.



Der Wissenschaftsfonds