



Second summer workshop on *Ultrafast Cluster Dynamics*
August 23 – 24, 2016

Location - *Max-Born-Hall, Max-Born-Strasse 2A, 12489 Berlin*



Scope

Nonlinear cluster science has attracted a lot of attention in recent years. Fascinating results have been reported within the last few years that provide new insights into transient dynamics of intense laser-cluster interactions as well as into cluster morphology and their growth process. The future progress of this research field is indispensably related to further development of theoretical methods and advanced experimental schemes in order to understand and to control highly complex non-equilibrium dynamics of many particle systems. The aim of this informal workshop jointly organized by Max-Born-Institute and TU Berlin is to continue the initiative started in 2014 in Rostock and to facilitate the discussion between active research groups on recent achievements and future challenges of studies of ultrafast cluster dynamics.

Local organization team

Bernd Schütte (Bernd.Schuette@mbi-berlin.de, +49 30 6392 1295)
Maria Krikunova (maria.krikunova@physik.tu-berlin.de, + 49 30 314 24090)
Daniela Rupp (daniela.rupp@physik.tu-berlin.de, +49 30 314 23008)
Petra Rapelius (petra.rapelius@mbi-berlin.de, secretary, accommodation issues)

Registration / Fee

- Registration required
- No registration fee
- Please contact P. Rapelius if you need assistance to find accommodation

Program

August 23

17:00 Arrival, get together barbeque evening and poster session
Family members and friends of *Ultrafast Cluster Dynamics* are very welcome

August 24 (talks 25 + 5 min)

8:50	<i>opening</i>	
	Chair person - Maria Krikunova	
9:00	Jan-Michael Rost (MPIPKS, Dresden)	"If 2629 atoms explode: The X-ray triggered desintegration of a lysozyme molecule"
9:30	Tim Laermann (DESY, Hamburg)	"Ultrafast dynamics of UV and soft x-ray excited nanoparticles"
10:00	Aaron Laforge (Uni Freiburg)	"Time-resolved electron solvation dynamics in hydrogen bonded clusters"
10:30	<i>Discussion (20 min)</i>	"Perspectives for time-resolved spectroscopy"
10:50	Coffee break (20 min)	
	Chair person – Karl-Heinz Meiwes-Broer	
11:10	Thomas Fennel (Uni Rostock)	"Control and dynamic x-ray imaging of ultrafast nanoplasma dynamics"
11:40	Yevheniy Ovcharenko (XFEL, Hamburg)	"Collective autoionization dynamics in He nanodroplets"
12:10	Daniela Rupp (TU Berlin)	„3D imaging of single clusters with XUV-FELs and HHG sources"
12:40	<i>Discussion (20 min)</i>	"Perspectives for ultrafast X-ray imaging and dynamics"
13:00	Lunch break	
	Chair person – Thomas Möller	
14:30	Josef Tiggesbäumker (Uni Rostock)	"Electron motion in clusters studied on a subcycle time-scale"
15:00	Tim Oelze (TU Berlin)	"Dynamics of XUV induced nanoplasma as revealed by THz streaking"
15:30	Bernd Schütte (MBI, Berlin)	"Few-cycle near-infrared and mid-infrared strong-field ionization of clusters"
16:00	<i>Discussion (20 min)</i>	"Perspectives for few-femtosecond and sub-cycle dynamics"
	<i>Summary and concluding remarks</i>	

Possibility for lab visits