

Symposium Laser-Cooled Molecules (SYLC)

jointly organised by
the Quantum Optics and Photonics Division (Q) and
the Molecular Physics Division (MO)

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Laser cooling of molecules, once considered impractical, has now emerged as a powerful tool for achieving precise control over molecular motion down to the quantum regime. Remarkable progress has been made in recent years on laser cooling of increasingly complex species, combining cooled molecules with tweezer arrays, and investigating novel cooling techniques. These advancements open up promising avenues for the application of cold, controlled molecules in precision measurements, quantum information, ultracold chemistry and beyond. This symposium gathers leading experts from both experimental and theoretical aspects to present and discuss the latest developments in this quickly advancing field.

Overview of Invited Talks and Sessions

(Lecture hall HS 1+2)

Invited Talks

SYLC 1.1	Fri	11:00–11:30	HS 1+2	Measuring the electron electric dipole moment with laser-cooled molecules — ●MICHAEL TARBUTT
SYLC 1.2	Fri	11:30–12:00	HS 1+2	Laser-cooling of molecules in various charge states — ●ROBERT BERGER
SYLC 1.3	Fri	12:00–12:30	HS 1+2	Progress in quantum gases of polar molecules: Collisions, laser cooling, and trapping techniques — MARA MEYER ZUM ALTEN BORGLOH, JULE HEIER, BARAA SHAMMOUT, FRITZ VON GIERKE, TIMO POLL, JULIUS NIEDERSTUCKE, PAUL KAEBERT, SEBASTIAN ANSKEIT, JAKOB STALMANN, LEON KARPA, MIRCO SIERCKE, ●SILKE OSPELKAUS
SYLC 1.4	Fri	12:30–13:00	HS 1+2	Progress in laser cooling the AlF molecule — ●SIDNEY WRIGHT

Sessions

SYLC 1.1–1.4	Fri	11:00–13:00	HS 1+2	Laser-cooled Molecules
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