

Symposium Laboratory Astrophysics (SYLA)

jointly organised by
the Molecular Physics Division (MO),
the Atomic Physics Division (A), and
the Mass Spectrometry Division (MS)

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After the formation of atoms and molecules in the universe they send out their radiation and as such they are ambassadors of distant regions in the universe which are observed from earth. They also act as probes for the physical and chemical conditions in these places and astrophysicists use laboratory spectra not only to identify these species in their observations but to determine their abundance. Conclusions drawn on their formation and destruction routes give intimate information on the development of stars, molecular clouds, on the atmospheres of extrasolar planets and other places in the universe. Laboratory astrophysics is providing the necessary microphysics data for this endeavor. The German community is rather active in this field and this symposium addresses some recent technical developments and scientific highlights.

Overview of Invited Talks and Sessions

(Lecture hall Audimax)

Invited Talks

SYLA 1.1	Mon	14:00–14:30	Audimax	Probing chemistry inside giant planets with laboratory experiments — ●DOMINIK KRAUS
SYLA 1.2	Mon	14:30–15:00	Audimax	Inner-shell photoabsorption of atomic and molecular ions — ●STEFAN SCHIPPERS
SYLA 1.3	Mon	15:00–15:30	Audimax	Molecular Astrophysics at the Cryogenic Storage Ring — ●HOLGER KRECKEL
SYLA 1.4	Mon	15:30–16:00	Audimax	Observing small molecules in stellar giants - High spectral resolution infrared studies in the laboratory, on a mountain, and high up in the air — ●GUIDO W. FUCHS
SYLA 2.1	Mon	16:30–17:00	Audimax	State-to-State Rate Coefficients for NH₃-NH₃ Collisions obtained from Pump-Probe Chirped-Pulse Experiments — ●CHRISTIAN P. ENDRES, PAOLA CASELLI, STEPHAN SCHLEMMER
SYLA 2.4	Mon	17:30–18:00	Audimax	A multifaceted approach to investigate the reactivity of PAHs under electrical discharge conditions — ●DONATELLA LORU, AMANDA L. STEBER, JOHANNES M. M. THUNNISSEN, DANIEL B. RAP, ALEXANDER K. LEMMENS, ANOUK M. RIJS, MELANIE SCHNELL
SYLA 2.5	Mon	18:00–18:30	Audimax	Exploring the Femtosecond Dynamics of Polycyclic Aromatic Hydrocarbons Using XUV FEL Pulses — ●JASON LEE, DENIS TIKHONOV, BASTIAN MANSCHWETUS, MELANIE SCHNELL

Sessions

SYLA 1.1–1.4	Mon	14:00–16:00	Audimax	Laboratory Astrophysics
SYLA 2.1–2.5	Mon	16:30–18:30	Audimax	Laboratory Astrophysics