

Symposium Trends in atom interferometry (SYAI)

organised by Working Group young DPG (AKjDPG)

supported by all divisions of the section AMOP

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Atom interferometry is a versatile tool to probe various aspects of fundamental physics at the interface of quantum mechanics and gravity. Starting with the first demonstration of light pulse interferometry in the beginning of the 90s, the field has developed to a flourishing research subject at the frontier of modern physics. Building upon recent insights and groundbreaking results, this symposium will discuss future experiments ranging from compact setups and space-borne apparatuses to very long baseline facilities. Especially young graduate students in master programmes are highly encouraged to participate on this symposium.

Overview of Invited Talks and Sessions

(Lecture hall e415)

Invited Talks

SYAI 1.1	Mon	14:00–14:30	e415	Atom interferometry and its applications for gravity sensing — •FRANCK PEREIRA DOS SANTOS, LUC ABSIL, ROMAIN CALDANI, XIAOBING DENG, ROMAIN KARCHER, SÉBASTIEN MERLET, RAPHAËL PICCON, SUMIT SARKAR
SYAI 1.2	Mon	14:30–15:00	e415	Atom interferometry for advanced geodesy and gravitational wave observation — •PHILIPPE BOUYER
SYAI 1.3	Mon	15:00–15:30	e415	Fundamental physics with atom interferometry — •PAUL HAMILTON
SYAI 1.4	Mon	15:30–16:00	e415	Atoms and molecules interacting with light — •LUCIA HACKERMÜLLER

Sessions

SYAI 1.1–1.4	Mon	14:00–16:00	e415	Trends in atom interferometry
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