

## Promovierendensymposium (SYPS)

### Velocity Map Imaging: Focusing on intra- and interatomic dynamics

jointly organized by  
the Working Group 'Young DPG' (AGjDPG) and  
all divisions of the section AMOP

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The introduction of Velocity Map Imaging (VMI) by Eppink and Parker in 1997 has had a great impact in a variety of fields in atomic- and molecular physics. It has become a powerful tool for studying photoelectron spectroscopy, molecules in strong laser fields, femto- and attosecond pump-probe spectroscopy as well as photodissociation and chemical reaction dynamics. Still, imaging techniques are continuously being further developed and refined as illustrated by new applications of VMI spectrometers, ranging from surface scattering experiments to spatial mapping of biological tissues.

The symposium shall present the VMI technique and demonstrate the diversity of dynamic processes that can be studied as well as the depth of insight that can be gained. The joint technique connects the research presented and, in this way, facilitates understanding of what drives a central topic in AMOP physics: the determination of intra- and interatomic dynamics.

## Overview of Invited Talks and Sessions

(Lecture room: Audimax)

### Invited Talks

SYPS 1.1	Thu	14:10–14:40	Audimax	<b>Oxygen and imaging, a perfect match</b> — ●DAVID PARKER
SYPS 1.2	Thu	14:40–15:10	Audimax	<b>Attosecond imaging</b> — ●MARC VRAKKING
SYPS 1.4	Thu	15:25–15:55	Audimax	<b>Applications of the fast imaging Pixel Imaging Mass Spectrometry camera</b> — ●MARK BROUARD
SYPS 2.1	Thu	16:30–17:00	Audimax	<b>Unraveling the dynamics of state- and conformer selected molecules fixed in space with the VMI</b> — ●JOCHEN KÜPPER
SYPS 2.3	Thu	17:15–17:45	Audimax	<b>Velocity map imaging: from molecules to clusters, nanoparticles and aerosols</b> — ●MICHAL FARNIK, VIKTORIYA POTERYA, JOZEF LENGYEL, ANDRIY PYSANENKO, PAVLA SVRCKOVA, JAROSLAV KOCISEK
SYPS 2.5	Thu	18:00–18:30	Audimax	<b>Velocity map imaging studies of quantum state resolved scattering at gas-solid and gas-SAMs surfaces</b> — ●DAVID J. NESBITT, MONIKA GRUETTER, J. ROBERT ROSCIOLI, CARL HOFFMAN, DANIEL J. NELSON

### Sessions

SYPS 1.1–1.4	Thu	14:00–15:55	Audimax	<b>Velocity map imaging - focusing on intra- and interatomic dynamics 1</b>
SYPS 2.1–2.5	Thu	16:30–18:30	Audimax	<b>Velocity map imaging - focusing on intra- and interatomic dynamics 2</b>