

## Trends in Magnetism TMAG 2022

4-9 September 2022, Venice (Italy)

### Invited sessions

#### Sunday, Sept. 4

##### Nobel Lecture - h.18:30

presenting author		title
Fert	Albert	Switching greener with spintronics (and going beyond with orbitronics, skyrmionics etc.)

#### Monday, Sept. 5

##### Keynote presentation - h.9:00

presenting author		title
Hoffmann	Axel	Spin Currents with Antiferromagnets

##### Invited session - Antiferromagnetic materials I - h.10:30

*Discussion Leader: Olivier Klein*

presenting author		title
Kioussis	Nicholas	Elasto-dynamical induced spin and charge pumping in bulk heavy metals
Aballe	Lucia	Direct X-ray detection of the spin Hall effect in CuBi
Reichlova	Helena	Spontaneous Hall effect in an unconventional antiferromagnet with vanishing magnetization

##### Invited session - Dynamics in Antiferromagnets I - h.16:30

*Discussion Leader: Andrei Slavin*

presenting author		title
Yan	Peng	Magnon frequency comb
Moriyama	Takahiro	Spin transport and dynamics in antiferromagnets
Wegrowe	Jean-Eric	Spin-Hall effect including screening: presence of longitudinal pure spin current

#### Tuesday, Sept. 6

##### Keynote presentation - h.9:00

presenting author		title
Lanzara	Alessandra	From excitons to topological excitons and their fingerprints on the electronic bandstructure

##### Invited session - Ultrafast light sources - h.10:30

*Discussion Leader: Paolo Vavassori*

presenting author		title
Foglia	Laura	Nanoscale transient magnetization dynamics: a comprehensive EUV TG study
Gruening	Myrta	Nonlinear and extreme nonlinear optics from first-principles
Brida	Daniele	Ultrafast electron transport at the nanoscale

##### Invited session - Dynamics in Antiferromagnets II - h.16:30

*Discussion Leader: Alexey Kimel*

presenting author		title
Bossini	Davide	Nonlinear coherent femtosecond spin dynamics in antiferromagnets
Chauleau	Jean-Yves	Observation and manipulation of antiferromagnetic distributions in magneto-electric multiferroics.
Först	Michael	Controlling magnetism through nonlinear phononics

## Wednesday, Sept. 7

### Keynote presentation - h.9:00

presenting author		title
Mizrahi	Alice	Multilayers of synaptic and neural operations in a magnetic tunnel junction network through rf-to-dc and dc-to-rf conversion

### Invited session - Unconventional computing - h.10:30

*Discussion Leader: Burkard Hillebrands*

presenting author		title
Fukami	Shunsuke	Probabilistic spintronics – from device physics to computing
Pirro	Philipp	Novel spin-wave sources for hybrid magnonic circuits
Finocchio	Giovanni	Computing with spintronic devices and probabilistic bits

### Invited session - Magnetism and correlated systems I - h.16:30

*Discussion Leader: Gaspare Varvaro*

presenting author		title
Lebrun	Romain	Detection and emission of coherent magnons in antiferromagnetic insulators
Forte	Fiona	Orbital mechanisms for novel phases in spin-orbit coupled Mott systems
Ciccarelli	Chiara	The importance of the interface for picosecond spin pumping in antiferromagnet-heavy metal heterostructures

## Thursday, Sept. 8

### Keynote presentation - h.9:00

presenting author		title
Jungwirth	Tomas	Emerging research landscape of altermagnetism

### Invited session - Antiferromagnetic materials II - h.10:30

*Discussion Leader: Mathias Klaui*

presenting author		title
Caretta	Antonio	A novel x-ray polarimeter for femtosecond magneto dynamical studies
Kent	Andy	Spin-orbit torques in antiferromagnet insulator/heavy metal heterostructures
Althammer	Matthias	Observation of the magnon Hanle effect in antiferromagnetic insulators

### Invited session - Magnetic X-ray imaging - h.16:30

*Discussion Leader: Nicolas Jaouen*

presenting author		title
Fischer	Peter	Recent advances with magnetic X-ray spectromicroscopy to investigate novel topological spin textures
Donnelly	Claire	Revealing three-dimensional spin textures with X-rays
Caretta	Lucas	Manipulating Excitations in Magnetic Oxides
Burgos Parra	Erick	X-ray magnetic circular dichroism as a tool to investigate magnetic nanostructures.

## Friday, Sept. 9

### Invited session - Magnetism and correlated systems II - h.9:00

*Discussion Leader: Pallavi Dhagat*

presenting author		title
Mokrousov	Yuriy	ORBITAL MAGNETISM OUT OF EQUILIBRIUM: DRIVING ORBITAL MOTION WITH FLUCTUATIONS, FIELDS AND CURRENTS
Acremann	Yves	Observation of spin voltage and -accumulation by spin resolved femtosecond photoelectron spectroscopy
Ozatay	Ozhan	Ultrathin Metallic Antiferromagnets spin current manipulation and thermal stability
Albertini	Franca	Exploiting magnetic and martensitic flexibility of metamagnetic Heusler thin films and nanostructures