

MC18 Magnetization dynamics at nanoscale

Wednesday, 4 September, morning

Chairs: Maciej Krawczyk, Alex Jenkins

Room:

| Hours | ID | Name | Type | Title |
|-------------|-------|-----------------------|---------|--|
| 10h30-11h00 | | Farkhad Aliev | Invited | Interface driven magnon dynamics in antiferromagnet-ferromagnet and superconductor-ferromagnet hybrids |
| 11h00-11h30 | 13324 | Kostyantyn Gusliyenko | Invited | Bloch-point domain wall dynamics in a cylindrical magnetic nanowire |
| 11h30-12h00 | 13664 | Oleg Tretiakov | Invited | Bimerons in Magnetic Topological Materials |
| 12h00-12h15 | 13056 | Yannik Kunz | Oral | Non-reciprocal phonon-magnon interaction in yttrium-iron-garnet/zinc oxide heterostructure |
| 12h15-12h30 | 13253 | Rostyslav Serha | Oral | Damping enhancement in YIG films at millikelvin temperatures caused by GGG |
| 12h30-12h45 | 12715 | Artem Talantsev | Oral | Tunnelling magnetoresistance platforms for linear positioning and nanoscale displacements sensing |
| 12h45-13h00 | 14037 | Ana Vieira Silva | Oral | Ultrafast Spectroscopies to Probe Magnetic and Electronic Dynamics |

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Wednesday, 4 September, afternoon

Chairs: Oleg Tretiakov, Yaroslav Bazaliy

Room:

| Hours | ID | Name | Type | Title |
|-------------|-------|---------------------|---------|---|
| 16h00-16h30 | 13775 | Maciej Krawczyk | Invited | Self-imaging effects in the field of magnonics: from the Talbot effect to computing |
| 16h30-17h00 | 13709 | Dmytro Bozhko | Invited | Magnetization dynamics from micro to macro scales: from magnetic rogue waves to macroscopic artificial spin ice |
| 17h00-17h30 | 13832 | Glib Kakazei | Invited | Dominant higher-order vortex gyromodes in circular magnetic nanodots |
| 17h30-17h45 | 12846 | John Mangeri | Oral | Coupled magnetostructural continuum model for multiferroic BiFeO ₃ : spin waves and switching |
| 17h45-18h00 | 13838 | Khrystyna Levchenko | Oral | Nanoscale Ga:YIG-based magnonic crystals |
| 18h00-18h15 | 13790 | Artem Bondarenko | Oral | Electrically controlled 2D magnon optics |
| 18h15-18h30 | 12985 | Marco Marino | Oral | Ab initio study of the Fe-phthalocyanine/NiO(001) spinterface |

**MC18 Magnetization dynamics at nanoscale**

Thursday, 5 September, morning

Chairs: Kostyantyn Gusliyenko, Dmytro Bozhko

Room:

| Hours | ID | Name | Type | Title |
|-------------|-------|------------------|---------|--|
| 10h30-11h00 | 12766 | Alex Jenkins | Invited | Exploiting the non-linear dynamics of defect-induced pinning in vortex-based magnetic tunnel junctions for physical unclonable functions |
| 11h00-11h30 | 13261 | Alexander Serga | Invited | Bose–Einstein condensation of magnons at nanoscale |
| 11h30-12h00 | 13444 | Yaroslav Bazaliy | Invited | Alternative current Hanle effect on a single ferromagnet/normal metal interface |
| 12h00-12h15 | 13100 | Andrey Voronov | Oral | Inverse-design magnonics with nodal FD solve |
| 12h15-12h30 | 12720 | Maksim Stebliy | Oral | Non-volatile frequency reconfiguration of vortex oscillators |
| 12h30-12h45 | 13635 | Martin Zonda | Oral | Quantum-classical analysis of spin relaxation in nonequilibrium magnetic nanojunctions |
| 12h45-13h00 | | | | Concluding remarks |