

Early Career Researchers' Presentations and Networking
EPSRC International Network for Spintronics
From Material Development to Novel Energy Efficient Technologies

~ Times shown are in BST (+1h for CEST, +8h for JST and -5h for EDT) ~

Zoom link to be provided by e-mail to registered participants

Invited talks: 25 min. presentation + 5 min. discussion

Contributed talks: 13 min. presentation + 2 min. discussion

Thursday, 19 May

07:50 (08:50/15:50) Welcome

08:00~10:00 (09:00~11:00/16:00~18:00) **Session 1: Magnonics and Magneto-Optical Effects**
Chair: Miina Leivoiskä (Spintec)

08:00 (09:00/16:00) Matthias Schweizer (TU Kaiserslautern) "Magnon condensation in thermal landscapes"

08:15 (09:15/16:15) David Breitbach (TU Kaiserslautern) "Amplification of spin waves by rapid cooling"

08:30 (09:30/16:30) David Salomini (Spintec) "Ultrafast opto-magneto-spintronics"

08:45 (09:45/16:45) Daiki Sekine (Tohoku Univ.) "Direct detection of mesoscopic magnetic toroidal moment by optical second harmonic generation"

09:00 (10:00/17:00) Anulekha De (TU Kaiserslautern) "Observation of terahertz frequency perpendicular standing spin wave modes in ultrathin permalloy films"

09:15 (10:15/17:15) Charlotte Bull (Univ. of Manchester) "Spintronic terahertz emitters: impact of structural and magnetic properties"

09:30 (10:30/17:30) Eva Prinz (TU Kaiserslautern) "Does the orbital angular momentum of light affect ultrafast demagnetization?"

09:45 (10:45/17:45) Ivan Vera Marun (Univ. of Manchester) "Update on graphene spintronics"

10:00 (11:00/18:00) Break

10:15~12:45 (11:15~13:45/18:15~20:45) **Session 2: Antiferromagnetic Spintronics and Interfaces**
Chair: Hiroto Masuda (Tohoku Univ.)

10:15 (11:15/18:15) Tom Thomson (Univ. of Manchester) "Overview of spintronics in Manchester"

10:45 (11:45/18:45) Razan Aboljadayel (Univ. of Leeds) "Synthetic antiferromagnetic skyrmions"

11:00 (12:00/19:00) Will Griggs (Univ. of Manchester) "Polarised neutron reflectometry characterisation of interfacial magnetism in an FePt/FeRh exchange spring"

11:15 (12:15/19:15) Christoforos Moutafis (Univ. of Manchester) "Magnetic skyrmions for nanocomputing"

11:30 (12:30/19:30) Thomas Nussle (Univ. of Leeds) "Magnetoelasticity: Using strain to control magnetic switching in antiferromagnets"

11:45 (12:45/19:45) Shoma Akamatsu (Tohoku Univ.) "Guidelines for attaining optimal soft magnetic properties in FeAlSi films"

12:00 (13:00/20:00) David Lloyd (Univ. of York) "Structural investigation of CoIrMnAl Heusler"

	alloy epitaxial films for spintronics applications"
12:15 (13:15/20:15)	Moritz Winter (<i>IFW Dresden</i>) "Magnetic imaging of antiskyrmions in $Mn_{1.4}PtSn$ using Lorentz TEM and electron holography"
12:30 (13:30/20:30)	Robert Lawrence (<i>Univ. of York</i>) "Atomistic control of magnetic anisotropy"
12:45 (13:45/20:45)	Photograph – Screenshot & Networking
13:00 (14:00/21:00)	Close

Friday, 20 May

08:00~10:00 (09:00~11:00/ 16:00~18:00)	<u>Session 3: 2D spintronics</u> <i>Chair: Misbah Yaqoob (TU Kaiserslautern)</i>
--	---

08:00 (09:00/16:00)	Matthew Rogers (<i>Univ. of Leeds</i>) "Towards molecular interface spintronics"
08:15 (09:15/16:15)	David Perkins (<i>Univ. of York</i>) "Twist-angle control of collinear Edelstein effect in van der Waals heterostructures"
08:30 (09:30/16:30)	Toby Bird (<i>Univ. of York</i>) "Gas phase synthesis of magnetic core-shell nanoparticles"
08:45 (09:45/16:45)	Chuang Chien-Wen (<i>Tohoku Univ.</i>) "Spectroscopy study of ferromagnetic topological insulator"
09:00 (10:00/17:00)	Ahmet Yagmur (<i>Univ. of Leeds</i>) "Towards functional topological insulator films"
09:15 (10:15/17:15)	Gabriele Bertolini (<i>Univ. of York</i>) "The field-emission regime of scanning tunneling microscopy for spintronic materials"
09:30 (10:30/17:30)	Fatima Ibrahim (<i>Spintec</i>) "Spin-orbit induced phenomena at ferromagnet/oxide and ferromagnet/2D material interfaces from first principles"
09:45 (10:45/17:45)	Harry Waring (<i>Univ. of Manchester</i>) "Exchange constant determination using multiple-mode FMR perpendicular standing spin waves"

10:00 (11:00/18:00)	Break
---------------------	-------

10:15~12:15 (11:15~13:15/ 18:15~20:15)	<u>Session 4: 3D spintronics and Magnetic Skyrmions</u> <i>Chair: David Lloyd (Univ. of York)</i>
--	--

10:15 (11:15/18:15)	Olivier Fruchart (Spintec) "3D spintronics"
10:45 (11:45/18:45)	Takaaki Dohi (<i>Johannes Gutenberg Univ. of Mainz</i>) "Dynamics of antiferromagnetically coupled skyrmions in synthetic antiferromagnet"
11:00 (12:00/19:00)	Miina Leiviskä (<i>Spintec</i>) "Atomistic simulations on imprinting of skyrmion textures from a ferromagnet to an antiferromagnet"
11:15 (12:15/19:15)	Takumi Yamazaki (<i>Tohoku Univ.</i>) "Optical thermometry for investigating spin caloritronics"
11:30 (12:30/19:30)	Hassan Al-Hamdo (<i>TU Kaiserslautern</i>) "Magnetization dynamics in thin film $Mn_2Au/Ni_{80}Fe_{20}$ bilayers"
11:45 (12:45/19:45)	Misbah Yaqoob (<i>TU Kaiserslautern</i>) "Spin-orbit torques in ferromagnetic heterostructures"
12:00 (13:00/20:00)	Philippa Shepley (<i>Univ. of Leeds</i>) "Thin films from the Royce deposition system"
12:15 (13:15/20:15)	Networking
12:30 (13:30/20:30)	Close