

TECHNICAL PROGRAM

Sunday 23.6.2019

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| 13:50-14:00 | Martin Veis Charles University | |
| T | Tutorial Seminars | <i>Chair: Arata Tsukamoto</i> |
| 14:00-15:30 | Tutorial 1 <i>All-Optical Magnetization Switching in Spin-Valve Structure Mediated by Spin-Polarized Hot Electron Transport</i> S. Iihama, Y. Xu, M. Deb, G. Malinowski, M. Hehn, J. Gorchon, E. E. Fullerton, and <u>S. Mangin</u> | |
| 15:30-15:45 | <i>Coffee Break</i> | |
| 15:45-17:15 | Tutorial 2 <i>Magnetic Skyrmions: From Topology to Technology</i> Geoffrey S.D. Beach | |
| 17:15-17:45 | We-03-1 (moved) <i>Antiferromagnetic Spintronics with (Anti)Skyrmions and Bimerons</i> <u>O. A. Tretiakov</u> | |
| 18:00-20:00 | Get Together | |

Monday 24.6.2019

Opening Remarks

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| 8:45-9:00 | Martin Veis Charles University |
| Mo-01 | Magneto-optical Phenomena and Devices I & Optics and Photonics <i>Chair: Martin Veis</i> |
| 9:00-9:30 | Mo-01-1 <i>Ferrimagnetic Garnet Thin Films for Magnetooptics and Spintronics</i> <u>C. A. Ross</u> , T. Fakhrul, Y. Zhang, Q. Du, L. Beran, S. Tazlaru, E. Rosenberg, C. O. Avci, G. S. D. Beach, M. Veis, L. Bi, and J. Hu |
| 9:30-10:00 | Mo-01-2 <i>Realization of Topological Tamm States by Thouless Pumping</i> <u>Y. Nakata</u> , Y. Ito, Y. Nakamura, and R. Shindou |
| 10:00-10:15 | Mo-01-3 <i>Silicon Integrated Magnetoplasmonic Metasurfaces Using Low Loss Ce:YIG Thin Films</i> J. Qin, R. Yang, T. Kang, L. Deng, J. Hu and <u>L. Bi</u> |
| 10:15-10:30 | Mo-01-4 <i>Terahertz Soft Mode Peculiarity in Barium-Lead Hexaferrite</i> <u>L. Alyabyeva</u> , V. Torgashev, D. Vinnik, A. Prokhorov, A. Ahmed, M. Dressel, B. Gorshunov |
| 10:30-10:45 | Mo-01-5 <i>Nonreciprocal Propagation in Optical Fibers</i> <u>Š. Višňovský</u> |
| 10:45-11:15 | <i>Coffee Break</i> |
| Mo-02 | New Concepts and New Materials / Devices I <i>Chair: Atsufumi Hirohata</i> |
| 11:15-11:45 | Mo-02-1 <i>Ferrimagnetic Spintronics</i> <u>K.-J. Lee</u> |
| 11:45-12:00 | Mo-02-2 <i>Skyrmion Interactions in an Ordered Lattice State</i> <u>J. Zázvorka</u> , N. Kerber, F. Dittrich, K. Raab, R. Gruber, M. Vafaee, K. Litzius, P. Virnaua, K. Bindera, M. Kläui |

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| 12:00-12:15 | Mo-02-3 <i>Spin Pumping, Spin Seebeck Effect and Corresponding Inverse Spin Hall Effect in Permalloy Dots-Topological Insulator Bilayers</i> <u>P. N. Skirdkov</u> , M. D. Davydova, P. V. Penkina, M.A. Kozhaev, J. G. Lin, J. C. Wu, J. C. A. Huang, K. A. Zvezdin, V.I. Belotelov, and A. K.Zvezdin |
| 12:15-12:30 | Mo-02-4 <i>Electrical Circular Polarization Switching at Room Temperature with Spin-Polarized Light Emitting Diodes</i> <u>N. Nishizawa</u> and H. Munekata |
| 12:30-13:45 | Lunch |
| Mo-03 | Magnetic X-ray Application <i>Chair: Peter Oppeneer</i> |
| 13:45-14:15 | Mo-03-1 <i>Terahertz Spin Dynamics</i> <u>S. Bonetti</u> |
| 14:15-14:30 | Mo-03-2 <i>Study of Coercivity Mechanism in Isotropic and Anisotropic Nd-Fe-B Sintered Permanent Magnets by Applying Magnetic Domain Observation Using Synchrotron X-Rays</i> <u>T. Nakamura</u> , J. Kida, Y. Matsuura, K. Toyoki, Y. Kotani, R. Maruyama, K. Uezato, K. Ishigami, K. Kajiwara, K. Sumitani, and R. Tamura |
| 14:30-14:45 | Mo-03-3 <i>Manipulation of Platinum Magnetism by Variation of Adjacent Magnetic 3D Metal Alloy Thin Films</i> <u>T. Kuschel</u> |
| 14:45-15:00 | Mo-03-4 <i>Element Specific Observation of Photo-Induced Ultrafast Magnetization Dynamics with Soft X-Ray Free Electron Laser</i> <u>K. Yamamoto</u> , S. E. Moussaoui, Y. Hirata, S. Yamamoto, H. Wadati, I. Matsuda |
| 15:00-15:30 | Coffee Break |
| Mo-04 | Ultrafast Dynamics / Reversal <i>Chair: Theo Rasing</i> |
| 15:30-15:45 | Mo-04-1 <i>Tunable All-Optical Magnetic Recording in Iron Garnet</i> <u>A. Stupakiewicz</u> , A. Frej, K. Szerenos, A. Kirilyuk, A. Kimel |

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| 15:45-16:00 | Mo-04-2 <i>Ultrafast Magnetic Recording with Terahertz Light</i> <u>I. Radu</u> , M. Shalaby, M. Hennecke, D. Engel, C. von Korff Schmising, A. Tsukamoto, C. P. Hauri, S. Eisebitt |
| 16:00-16:15 | Mo-04-3 <i>Nanostructured Magnetic Dielectrics for Ultrafast Magnetization Control by fs-Laser Pulses</i> A. I. Chernov, M. A. Kozhaev, D. O. Ignatyeva, M. Levy, D. Karki, A. N. Shaposhnikov, <u>V. I. Belotelov</u> |
| 16:15-16:30 | Mo-04-4 <i>Far and Mid-Infrared Excitation of Large Amplitude Spin Precession in Ferromagnetic Semiconductor InMnAs</i> <u>A. Gatilova</u> , E. Mashkovich, K. Grishunin, A. Pogrebna, R. V. Mikhaylovskiy, Th. Rasing, P. Christianen, H. Munekata and A. V. Kimel |
| 16:30-16:45 | Mo-04-5 <i>Spin-Polarized Ultrafast Current Pulses in a Vertical Ferromagnet-Photodiode Heterostructure</i> <u>T. Janda</u> , T. Ostatnický, P. Němec, Z. Šobáň, V. Hills, and J. Wunderlich |
| 16:45-17:00 | Mo-04-6 <i>Efficient All-Optical Helicity-Dependent Magnetization Switching in a Ferromagnet with Dual Laser Pulses</i> <u>K. T. Yamada</u> , K. H. Prabhakara, T. Li, F. Ando, S. Semin, T. Ono, A. Kirilyuk, A. V. Kimel, Th. Rasing |

17:00-18:45 **Poster Session (Mo-P)**

Magneto-optical Phenomena and Devices

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| Mo-P-01 | <i>Photo-Induced and Magneto-Optical Phenomena in Europium Chalcogenides EuX (X = O, S, Se, Te)</i> <u>V. V. Pavlov</u> |
| Mo-P-02 | <i>Magneto-Optical Spectroscopy by Polarization Modulation Method Using a Multichannel Spectrometer</i> <u>S. Wang</u> , M. Nishikawa, T. Ishibashi and K. Sato |
| Mo-P-03 | <i>Random Number Generation Using Magnetic Domain Images of Magneto-Optical Materials</i> <u>T. Kawashima</u> , S. Mito |

- Mo-P-04 *Magneto-Optical Effect in Magnetic Layer / Heavy Metal Layer Hetero-Structure*
 K. Matsumoto, S. Sumi, K. Tanabe, and H. Awano
- Mo-P-05 *Low-Temperature Fabrication of Bi-Substituted Neodymium Iron Garnet Films by an Excimer Laser Assisted Metal Organic Deposition Process*
 M. Nishikawa, H. Aiba, M. Kawahara, T. Nakajima, T. Tsuchiya, T. Ishibashi
- Mo-P-06 *Influence of Epitaxial Strain on Electronic Transitions In $La_{2/3}Sr_{1/3}MnO_3$ Ultrathin Films*
 M. Zahradník, T. Maleček, T. Maroutian, G. Kurij, G. Agnus, P. Lecoeur, L. Beran, M. Veis
- Mo-P-07 *Magneto-Optical Spectroscopy of Ferromagnetic Fe-Mn-Ga Magnetic Shape Memory Heusler Alloys*
 D. Kral, L. Beran, R. Antos, J. Hamrle, O. Perevertov, M. Rames, O. Heczko, M. Veis
- Mo-P-08 *Magneto-Optic Light Deflector Controlled by the State of Stepping Motors*
 K. Shimura, S. Mito
- Mo-P-09 *Origin of Optical and Magneto-Optical Properties of $Tb_3Fe_5O_{12}$ in Nir/Vis/UV Region*
 L. Beran, E. Rosenberg, J. Šetina, A. Quindeau, C. A. Ross, M. Veis
- Mo-P-10 *Large Magneto-Optical Response of $Nd_{0.5}Bi_{2.5}IGG$ Ultra Thin Film*
 J. Šetina, L. Beran, M. Veis, T. Ishibashi
- Mo-P-11 *Magnetic Polarons Revealing by Photo-Induced Kerr Effect in Bulk EuS*
 V. N. Kats, P. A. Usachev, V. V. Kaminskii, V. V. Pavlov
- Mo-P-12 *Strong Quadratic Magneto-Optical Response of Ultrathin YIG Film at Low Temperatures*
 E. Schmoranzerova, T. Janda, P. Nemec, Z. Soban, H. Reichlova, M. Munzenberg, E.-J. Guo, M. Klaui
- Mo-P-13 *Magneto-Optical Nonreciprocal Metasurfaces Using All Dielectric Resonances*
 J. Qin, W. Yang, J. Long, Q. Du, L. Deng, J. Hu and L. Bi

- Mo-P-14 *Sensitivity Tuning of Magnetic Field Sensor Based on Magnetoplasmonic Crystal*
D. V. Murzin, V. K. Belyaev, V. Novosad, A. A. Grunin, A. A. Fedyany, V. V. Rodionova
- Mo-P-15 *Quadratic Magnetooptic Kerr Effect of Cubic (011) and Cubic (111) Thin Films*
R. Silber, J. Hamrle, T. Kuschel
- Mo-P-16 *Theoretical Study on The Enhancement of Magneto-Optic Kerr Effect Using Silica Thin Film*
T. Tachizaki and H. Mizuno
- Mo-P-17 *Magnetic Fields to Focalize and Accelerate Ions Produced by ns Laser-Generated Plasmas*
L. Torrisi, G. Costa
- Mo-P-18 *Optical and Magneto-Optical Spectroscopy of Co Doped Ni-Mn-Ga Films*
L. Nowak, D. Král, S. Schwabe, A. Diestel, K. Nielsch, O. Heczko, L. Beran, S. Fähler, M. Veis
- Mo-P-33 *Magnetocrystalline Anisotropy of Mn Induced Bi_2X_3 ($X=Se, Te$) Heterostructure: DFT Study (Post-Deadline)*
S. A. Khan, O. Caha, O. Rader, G. Springholz, J. Minár

Ultrafast Dynamics / Reversal

- Mo-P-19 *Laser-Induced Spin Currents and Spin Transfer Torque in Noncollinear Magnetic Structures*
P. Baláž, K. Carva, U. Ritzmann, J. Hurst, M. Zwierzycki, P. Maldonado, P. M. Oppeneer
- Mo-P-20 *Ultrafast Dynamics of the Induced and Intrinsic Magnetic Moments in Ferromagnetic Alloys*
I. Vaskivskyi, R. S. Malik, J. Brock, E. Fullerton, and H. Durr
- Mo-P-21 *All-Optical Magnetization Switching In GdFeCo on Electronic Heat Conversion Layers*
H. Yoshikawa, Y. Kasatani, and A. Tsukamoto
- Mo-P-22 *Ultrafast Excitation of Coherent Magnon and Phonon in Multiferroic Bismuth Ferrite*
K. Matsumoto, P. Khan, M. Kanamaru, T. Ito, T. Satoh

- Mo-P-23 *Electrical Detection of Single Shot All-Optical Magnetization Switching in Ferrimagnetic GdFeCo Alloy*
Y. Kasatani, H. Yoshikawa and A. Tsukamoto
- Mo-P-24 *Ultrafast Laser-Induced Spin-Reorientation Transition in Magnetite Fe₃O₄*
I. O. Karpovsky, D. L. Kazenwadel, A. M. Balbashov, A. M. Kalashnikova
- Mo-P-25 *Light Switching of Magnetization in Europium Selenide*
P.A. Usachev, X. Gratens, V. A. Chitta, G. Springholz, and A.B. Henrique
- Mo-P-26 *Magnetic Moment Generation in Small Gold Nanoparticles via the Plasmonic Inverse Faraday Effect (Post-Deadline)*
J. Hurst and P. M. Oppeneer

Optics and Photonics

- Mo-P-27 *Optical Properties and Solar Energy Conversion of a MoS₂/TiO₂ Heterojunctions*
Ł. Jarosiński, K. Kollbek, A. Tąta, E. Proniewicz and M. Przybylski
- Mo-P-28 *Surface Plasmon Polariton Device for Spin Wave Excitation*
K. Kimura, Y. Ashizawa, S. Ohnuki, and K. Nakagawa
- Mo-P-29 *Design of Film Structure for a Fiber Type Magnetic Sensor Using Magneto-Plasmonic Effect*
A. Nakayama, Y. Ashizawa, and K. Nakagawa
- Mo-P-30 *Annealing Temperature Dependence on Magneto-Plasmonic Effect of Ag-Co Single Layer Films*
Y. Ashizawa, K. Bando, S. Ohnuki, and K. Nakagawa
- Mo-P-31 *Coupled Wave Method with Modified Boundary Conditions for Diffraction Grating Calculations*
R. Antoš, M. Veis

Magnetic X-ray Applications

- Mo-P-32 *Spatially-, Temporally-, and Elementally-Resolved Imaging of Magnetization Dynamics with X-Ray Magnetic Circular Dichroism*
N. Kikuchi, T. Yomogita, K. Sato, S. Okamoto, O. Kitakami, H. Osawa, M. Suzuki, Y. Kotani, K. Toyoki, and T. Nakamura

Tuesday 25.6.2019

| Tu-01 | New Concepts and New Materials / Devices II <i>Chair: Alexey Kimel</i> |
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| 9:00-9:30 | Tu-01-1 <i>Spin Pumping into Superconductors Provides Evidence for Superconducting Pure Spin Currents</i> C. Ciccarelli |
| 9:30-10:00 | Tu-01-2 <i>Scaling the Spintonics Memory Function with Perpendicular Anisotropy</i> <u>R. C. Sousa</u> , N. Perrissin, L. Tillie, J. Chatterjee, S. Lequeux, N. Strelkov, L. Vila, L. Buda-Prejbeanu, S. Auffret, I.L. Prejbeanu, B. Dieny |
| 10:00-10:15 | Tu-01-3 <i>Thermally-Assisted Magnetisation Reversal in A Giant Magnetoresistive Junction</i> W. Frost, T. Seki, T. Kubota, R. Ramos, E. Saitoh, K. Takanashi and <u>A. Hirohata</u> |
| 10:15-10:30 | Tu-01-4 <i>Magnetization Dynamics in SrRuO₃ Thin Films</i> <u>M. Zahradník</u> , K. Uhlířová, T. Maroutian, M. Veis, G. Kurij, G. Agnus, Ph. Lecoeur |
| 10:30-10:45 | Tu-01-5 <i>Dipole Coupled Nanomagnet Reservoir with Multibit Input Data</i> <u>H. Nomura</u> , K. Tsujimoto, M. Goto, N. Samura, R. Nakatani, Y. Suzuki |
| 10:45-11:15 | <i>Coffee Break</i> |

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| Tu-02 | Antiferromagnetic Materials and Antiferromagnetic Spintronics I <i>Chair: Takuya Satoh</i> |
| 11:15-11:45 | Tu-02-1 <i>Antiferromagnetic Spintronics: from Terahertz to Neuromorphics</i> <u>T. Jungwirth</u> |
| 11:45-12:00 | Tu-02-2 <i>Pump-Probe Magneto-Optical Studies of Compensated Antiferromagnet CuMnAs</i> <u>P. Němec</u> , V. Saidl, M. Surýnek, and T. Ostatnický |
| 12:00-12:15 | Tu-02-3 <i>Magnon-Photon Coupling in Ferrites</i> <u>M. Bialek</u> , A. Magrez and J.-Ph. Ansermet |
| 12:15-12:30 | Tu-02-4 <i>Spin Currents in Collinear and Non-Collinear Antiferromagnets</i> <u>J. Železný</u> |
| 12:30-13:45 | Lunch |
| 13:45-15:30 | Poster Session (Tu-P) |

Energy Assisted Magnetic Recording

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| Tu-P-01 | <i>Effects of Dot-Position of BPM, Thermal Distribution, and Gradient of Head-Field on Bit Error Rate for HAMR</i> <u>F. Akagi</u> and N. Matsushima |
| Tu-P-02 | <i>Transient of the Growth of Magnetization Precession in Unstable Regime</i> <u>N. Kitajima</u> , G. Okano, and Y. Nozaki |
| Tu-P-03 | <i>Magnetic Write Field Characterization in Heat-Assisted Magnetic Recording Systems</i> <u>P. Kampun</u> , L. Lekawat, and D. Tongsomporn |

New Recording Media / Nano Magnetic Materials

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| Tu-P-04 | <i>Observation of Thermal Distribution in Magnetic Wire Under Current Injection</i> <u>T. Sawa</u> , S. Sumi, P. Thach, K. Tanabe and H. Awano |
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| Tu-P-05 | <i>Electric-Field-Assisted Spin Hall Magnetization Switching in MgO/Co/Pt Trilayers</i> <u>K. Kunishima</u> , X. Zhou, D. Oshima, T. Kato, S. Iwata |
| Tu-P-06 | <i>Surface Roughness and Morphology of Garnet Films Made by MOD Method</i> <u>K. Murata</u> , Y. Ashizawa, S. Ohnuki, and K. Nakagawa |
| Tu-P-07 | <i>Photovoltage Spectroscopy of Spin Excitation of Ferromagnetic Disk at Low Temperature in Two Dimensional Electron Gas Systems</i> <u>N. K. Almulhem</u> , M. E. Stebliy, A. Nogaret, J. C. Portal, A. S. Samardak, H. E. Beere, and D. A. Ritchie |
| Magnonics | |
| Tu-P-08 | <i>Optical Excitation of Spin Waves with an Arbitrary Distribution</i> <u>M. A. Kozhaev</u> , A. I. Chernov, I. V. Savochkin, I. Yu. Eremchev, A. K. Zvezdin, V. I. Belotelov |
| Tu-P-09 | <i>Flat Bands, Indirect Gaps, and Unconventional Spin-Wave Behavior Induced by a Periodic Dzyaloshinskii-Moriya Interaction</i> <u>R. Gallardo</u> , D. Cortés-Ortuño, T. Schneider, A. Roldán-Molina, F. Ma, K. Lenz, H. Fangohr, J. Lindner, P. Landeros |
| Tu-P-10 | <i>Time-Domain Detection of Multiple Spin-Wave Solitons Generation</i> <u>M. Kawase</u> , M. Iwaba, and K. Sekiguchi |
| Tu-P-11 | <i>Magnon Raman Scattering in BiFeO₃</i> <u>M. Kichise</u> , Y. Fujii, A. Koreeda, T. Ito, T. Satoh |
| Tu-P-12 | <i>Design of Metalens for Spin Waves</i> M. Zelent, M. Mailian, V. Vashistha, P. Gruszecki, O.Yu. Gorobest, Yu.I. Gorobest, <u>M. Krawczyk</u> |
| Tu-P-13 | <i>Magnon Raman Scattering in Y₃Fe₅O₁₂</i> <u>W.-H. Hsu</u> , M. Kichise, Y. Fujii, A. Koreeda, T. Satoh |
| Tu-P-14 | <i>Electromagnons and Origin of Giant Magnetoelectric Coupling in Multiferroics with Y- and Z-Type Hexaferrite Structure</i> <u>S. Kamba</u> , J. Vít, F. Kadlec, C. Kadlec, F. Borodavka, and Y. S. Chai |

New Concepts and New Materials / Devices

- Tu-P-15 *Magneto-Optical Study of Helical Domain Structures in Cylindrical Microwires*
A. Chizhik, A. Zhukov, J. Gonzalez, P. Gawroński, A. Stupakiewicz
- Tu-P-16 *Spin Orbit Torques in Ferrimagnetic GdFeCo with Various Compositions*
K. Kawakami, D. Oshima, T. Kato, S. Iwata
- Tu-P-17 *Current-Induced Domain Wall Motion Driven by Spin Orbit Torque in Ferrimagnetic GdFeCo Wires*
P. V. Thach, A. Takahashi, S. Sumi, H. Awano
- Tu-P-18 *Influence of Perpendicular RF Fields in Spin Torque FMR Measurment*
T. Horaguchi, Y. Nozaki
- Tu-P-19 *Imparting Memory Functionality to Planer Wave-Guide Structures with Photo-Magnetic Materials*
H. Munekata, S. Ogawa, K. Michihiro, K. Nishibayashi, and
N. Nishizawa
- Tu-P-20 *Switching of Skyrmion Chirality by Local Heating*
Y. Nakatani, K. Yamada, A. Hirohata
- Tu-P-21 *Acceleration of Resonance State Calculation Using the LLG Equation*
C. Mitsumata, S. Tomita, and K. Ono
- Tu-P-22 *Ferromagnetic Resonance of a [GeTe / Sb₂Te₃] / Py Super Lattice*
S. Sumi, Y. Hirano, and H. Awano
- Tu-P-23 *Structure and Magnetic Properties of FeMnGaN Alloy Thin Films*
K. Ohwada, M. Doi and T. Shima
- Tu-P-24 *(001) Oriented CoFe₂O₄ Thin Films on Glass and Si Substrates Prepared by MOD Method*
K. Yasuda, M. Nishikawa and T. Ishibashi
- Tu-P-25 *An Application of Spin-LED: Unstaining and Non-Invasive Cancer Detection Using Circularly Polrized Light*
A. Hamada, H. Munekata and N. Nishizawa

- Tu-P-26 *Comparison of Properties Between Pr-Fe-B and Nd-Fe-B Thick-Film Magnets Applied to MEMS*
M. Nakano, M. Omoto, K. Takashima, A. Yamashita, T. Yanai, A. Shinshi, and H. Fukunaga
- Tu-P-27 *"Hot" Electrons Lead to Record Thermionic Emission in LaB₆*
L. Alyabyeva, E. Zhukova, B. Gorshunov, M. Dressel, G. Komandin, M. Belyanchikov, Z. Bedran, A. Muratov, Yu. Aleshchenko, M. Anisimov, N. Shitsevalova, A. Dukhnenko, V. Filipov, V. Voronov, N. Sluchanko
- Tu-P-28 *Infrared Spectrum of Graphene Compared with Fullerene as Astronomical Carbon Dust*
N. Ota
- Antiferromagnetic Materials and Antiferromagnetic Spintronics**
- Tu-P-29 *Magnetoelectric Excitations in Polar Antiferromagnetic Nickel Tellurates Substituted by Mn and Co*
C. Kadlec, S. Skiadopoulou, M. Retuerto, F. Kadlec, F. Borodavka, M. Mišek, M. Greenblatt and S. Kamba
- Tu-P-30 *Magneto-Optical Spectra of a Frustrated Antiferromagnet: Theory and Experiment*
J. Zemen
- Tu-P-31 *Rare Earth (RE)-Transition Metal (TM) Ferrimagnets for Spintronics*
R. Ch. Bhatt, L.-X. Ye, Y.-C. Luo and T.-H. Wu
- Tu-P-32 *High-Temperature Regeneration of Perpendicular Exchange Bias in Pt/Co/Au/Cr₂O₃/Pt Stacked Films*
Y. Shiratsuchi, D. Tokunaga, R. Nakatani
- Tu-P-33 *The Magnetic Order of Antiferromagnetic Mn₃NiN Thin Films Under Biaxial Strain*
D. Boldrin, F. Johnson, A. P. Mihai, B. Zou, J. Zemen, J. Wunderlich, W. R. Branford and L.F. Cohen
- Tu-P-34 *Photocurrents in 3D Topological Insulator Hall Bar and Nanowire Devices*
N. Meyer, T. Schumann, E. Schmoranzerová, K. Geishendorf, G. Mussler, J. Walowski, P. Nemec, A. Thomas, K. Nielsch, D. Grützmacher, M. Münzenberg

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| Tu-03 | Energy Assisted Magnetic Recording |
| | <i>Chair: Katsuji Nakagawa</i> |
| 15:30-16:00 | <p>Tu-03-1 <i>Advanced Concepts of High-Density Heat-Assisted Magnetic Recording</i> <u>Ch. Vogler</u></p> |
| 16:00-16:15 | <p>Tu-03-2 <i>All-Optical Helicity-Dependent Magnetization Switching of Iron-Platinum Magnetic Recording Media</i> R. John, <u>J. Walowski</u>, C. Müller, M. Berritta, D. Hinzke, P. Nieve, O. Chubykalo-Fesenko, T. Santos, H. Ulrichs, R. Mondal, P. M. Oppeneer, U. Nowak, J. McCord, M. Münzenberg</p> |
| 16:15-16:30 | <p>Tu-03-3 <i>Transition Jitter and SNR Analysis in HAMR Process Under Impact of Media H_k and T_c Variations</i> <u>W. Tipcharoen</u>, Ch. Warisarn, and D. Tongsomporn</p> |
| 16:30-16:45 | <p>Tu-03-4 <i>Background Interference Impact of Heat Sink Layer in Heat Assisted Magnetic Recording</i> <u>N. Chaidaungsri</u>, S. Kaitwanidvilai, D. Tongsomporn</p> |
| 16:45-17:15 | <i>Coffee Break</i> |
| Tu-04 | New Recording Media / Nano Magnetic Materials II |
| | <i>Chair: Hermann A. Durr</i> |
| 17:15-17:45 | <p>Tu-04-1 <i>Microwave Assisted Switching on CoPtCr-Based Granular Media</i> <u>N. Kikuchi</u>, K. Sato, S. Kikuchi, S. Okamoto, O. Kitakami, T. Shimatsu</p> |
| 17:45-18:00 | <p>Tu-04-2 <i>Does Spin Orbit Torque also Work on Current Driven Domain Wall Motion of Thick GdFeCo (500 nm) Single Layer Magnetic Wire without Heavy Metal Pt Layer?</i> A. Takahashi, S. Sumi, P. V. Thach, K. Tanabe, Y. Kurokawa and <u>H. Awano</u></p> |
| 18:00-18:15 | <p>Tu-04-3 <i>Spin Transfer Torque Switching of Hybrid Memory Layers with Low Curie Temperature CoPd/Pd Multilayers</i> <u>W. Zhao</u>, T. Kato, D. Oshima, Y. Sonobe, S. Takahashi, S. Iwata</p> |

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| 18:15-18:30 | Tu-04-4 <i>Precision Deep Layer-By-Layer Etching of Bi-YIG Films</i> <u>M. V. Logunov</u> , S. A. Nikitov, A. I. Stoghi, S. S. Safonov, A. S. Il'in, and A. G. Temiryazev |
| Tu-SP | Special Talk <i>Chair: Arata Tsukamoto</i> |
| 18:30-18:50 | <i>Magnetism and Optics of Graphene Materials in the Astronomical Interstellar Space - Celebrating 28 Years Anniversary of Moris Conference</i> <u>N. Ota</u> |
| 18:50-19:05 | Award Ceremony & Photograph |
| <i>19:15-21:45</i> | <i>Conference Dinner</i> <i>Pilsen restaurant in Municipal House</i> |

Wednesday 26.6.2019

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| We-01 | Magneto-optical Phenomena and Devices II | <i>Chair: Takayuki Ishibashi</i> |
| 9:00-9:30 | We-01-1 <i>Linear and Quadratic Magnetooptic Spectroscopy on Bcc Fe</i> <u>J. Hamrle</u> | |
| 9:30-9:45 | We-01-2 <i>Unconventional Non-Reciprocal Magneto-Optical Effects in a Magnetoelectric Antiferromagnet CuB₂O₄</i> K. N. Boldyrev, A. D. Molchanova, M. N. Popova, and <u>R. V. Pisarev</u> | |
| 9:45-10:00 | We-01-3 <i>Periodically Driven Spinwaves by Ultrafast Laser Pulses with a High Repetition Rate</i> <u>A. Aleman</u> , S. Muralidhar, A. Awad, R. Khymyn, D. Hanstorp and J. Åkerman | |
| 10:00-10:15 | We-01-4 <i>A Study on Spectral-Domain Formulation of Electromagnetic Scattering by Defected Grating Made of Anisotropic Materials</i> <u>K. Watanabe</u> | |
| 10:15-10:30 | We-01-5 <i>High Sensitive DC Mangetic Field Sensor Based on Magetoplasmonic Crystal</i> <u>V. K. Belyaev</u> , D.V. Murzin, A. A. Grunin, A. A. Fedyanin, V. V. Rodionova | |
| 10:30-11:00 | <i>Coffee Break</i> | |
| We-02 | Magnonics | <i>Chair: Roman Antos</i> |
| 11:00-11:30 | We-02-1 <i>How to Generate Whispering Gallery Magnons</i> <u>K. Schultheiss</u> | |
| 11:30-11:45 | We-02-2 <i>Shape-Forming of Spin Wave Packets by Dynamic Magnonic Crystal</i> <u>M. Iwaba</u> and K. Sekiguchi | |

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| 11:45-12:00 | We-02-3 <i>Uniaxial Magnetic Anisotropy Modulation in Thin Permalloy Films</i> <u>I. Turčan</u> , L. Flajšman, M. Vaňatka, M. Urbánek |
| 12:00-12:15 | We-02-4 <i>Edge Localised Spin Waves in Antidot Lattices Based on Multilayers with Perpendicular Magnetic Anisotropy</i> S. Pan, R. Szwierz, S. Mondal, M. Zelent, S. Pal, O. Hellwig, <u>M. Krawczyk</u> , and A. Barman |
| 12:15-13:30 | Lunch |
| We-03 | Antiferromagnetic Materials and Antiferromagnetic Spintronics II <i>Chair: Marcin Bialek</i> |
| 13:30-13:45 | We-03-5 <i>Tetragonal vs. Orthorombic CuMnAs: Phase Stability and the Role of Defects</i> <u>K. Carva</u> , K. Uhliřová, P. Baláž, I. Turek, F. Máca, J. Kudrnovský, V. Drchal |
| 13:45-14:00 | We-03-6 <i>Efficient Terahertz Radiation from a Single Ferromagnetic Layer</i> <u>Q. Zhang</u> , Z. Luo, H. Li, Y. Yang, X. Zhang, and Y. Wu |
| 14:00-14:15 | We-03-2 <i>Scanning Magneto-Thermoelectric Imaging of Spin-Orbit Torque Switching in Antiferromagnetic Films</i> <u>J. Wunderlich</u> |
| 14:15-14:30 | We-03-3 <i>First-Principles Theory of Electrically Induced Magnetization in Noncentrosymmetric Antiferromagnets</i> <u>L. Salemi</u> , M. Berritta, A. K. Nandy, P. M. Oppeneer |
| 14:30-14:45 | We-03-4 <i>Double Pump THz Emission Spectroscopy of Multiscale Kinetics of the Magnetic Phase Transition in FeRh</i> <u>G. Li</u> , R. Medapalli, R. V. Mikhaylovskiy, Th. Rasing, E.E. Fullerton, and A. V. Kimel |
| Closing Remarks | |
| 14:45-15:00 | Takeshi Kato Nagoya University |