# <2021 가을 학술논문발표회 우수발표상 수상명단(구두발표부문)>

* 총 72건

**A1.08***

**The measurement of forward-backward asymmetry in Drell-Yan with a single b-jet events at LHC** / YANG Un-ki[*1], JUN Won[1], SEO HyonSan[1] ([1]Dept. of Physics and Astronomy, Seoul National University)

**A3.02***

**Performance of a prototype Active target TPC** / KIM Geunwoo[1], KIM Yongsun[*1] ([1]Sejong University)

**A3.05***

**Improvement for Prototype Beam Drift Chamber (BDC) of the LAMPS Experiment** / SEO Junhu[1], MOON Dong Ho[*1], KIM Hyunchul[1], BAE Yunseul[1], HWANG Jaein[2] ([1]Dept. of Physics, Chonnam National University, [2]Dept. of Physics, Korea University)

**A8.02***

**$Sr_2IrO_4/Sr_3Ir_2O$ superlattice for a model 2D quantum Heisenberg antiferromagnet** / KIM Hoon[1,2], BERTINSHAW Joel[3], PORRAS Juan[3], KEIMER Bernhard[3], KIM Jungho[4], KIM J.-W.[4], KIM Jimin[1,2], KIM Jonghwan[2,5], NOH Gahee[5], KIM Gi-Yeop[5], CHOI Si-Young[5], KIM Bumjoon[*1,2] ([1]Dept. of Physics, POSTECH, [2]Center for Artificial Low Dimensional Electronic Systems, Institute for Basic Science, [3]Solid State Spectroscopy, Max Planck Institue for Solid State Research, [4]Advanced Photon Source, Argonne National Laboratory , [5]Departmenrt of Materials Science and Engineering, POSTECH)

**A9.07***

**Spin-lattice coupling in monolayer $VTe_2$** / KIEM Do Hoon[1], JEONG Min Yong[1], YOON Hongkee[1], HAN Myung Joon[*1] ([1]Dept. of Physics, KAIST)

**A10.01***

**Commensurate $C_{60}$ thin film crystal on black phosphorus for van der Waals vertical transistors** / KIM Kwanpyo[*1], YUN Tae Keun[1] ([1]Dept. of Physics, Yonsei University)

**A10.04***

**VdW Schottky gate metal-semiconductor field-effect approaching the Boltzmann switching limit** / KIM Yeon Ho[1], LEE Donghun[1], JIANG Wei[2], KIM Jong Chan[3], HUH Woong[1], KIM Tae Soo[4], SO Jae-Pil[5], LEE Jae Ho[1], PARK Hong-Gyu[5], KANG Kibum[4], JEONG Hu Young[3], LOW Tony[2], LEE Chul-Ho[*1,6] ([1]KU-KIST Graduate School of Converging Science and Technology, Korea University, [2]Department of Electrical and Computer Engineering, University of Minnesota, [3]Department of

Materials Science and Engineering, UNIST, [4]Department of Materials Science and Engineering, KAIST, [5]Dept. of Physics, Korea University, [6]Department of Integrative Energy Engineering, Korea University)

**A11.03***

**Neuromorphic devices based on electrochemical metallization in the ferroelectric material** / PARK Bae Ho[*1], YOON Chansoo[1], LEE Ji Hye[2], KIM Young Heon[3] ([1]Dept. of Physics, Konkuk University, [2]Dept. of Physics and Astronomy, Seoul National University, [3]Graduate School of Analytical Science and Technology, Chungnam National University)

**A11.05***

**NaF doping layer in flexible $Cu_2ZnSn(S,Se)_4$ thin film solar cells: improvement of photogenerated carrier transport** / PARK Ha Kyung[1], CHO Yunae[1,2], KIM Sammi[3], YANG Kee-Jeong[3], KIM Dae-Hwan[3], KANG Jin-Kyu[3], JO William[*1,2] ([1]Dept. of Physics, Ewha Womans University, [2]New and Renewable Energy Research Center, Ewha Womans University, [3]Division of Energy Technology, Daegu Gyeongbuk Institute of Science and Technology)

**A16.04***

**Observation of magnetic-field-induced optical vortex-antivortex pair** / KIM Dongha[*1], BAUCOUR Arthur[2], CHOI Youn-Seok[3], SHIN Jonghwa[2], SEO Min-Kyo[1] ([1]Dept. of Physics, KAIST, [2]Department of Materials Science and Engineering, KAIST, [3]Department of Chemistry, KAIST)

**A19.02***

**Focused-ion-beam induced nanoscale luminescence quenching for high purity quantum emitters** / CHOI Minho[2], JUN Seongmoon[2], WOO Kie Young[2], SONG Hyun Gyu[2], YEO Hwanseop[2], CHOI Sunghan[2], PARK Doyoun[2], PARK Chung-Hyun[2], CHO Yong Hoon[*2] ([1]KAIST, [2]Dept. of Physics and KI for the NanoCentury, KAIST)

**A20.03***

**Structural dissection of human glucose transporter folding reveals evolutionary balancing between foldability and functionality** / LEE Chanwoo[1], CHOI Hyun-Kyu[1], KANG Hyunook[1], KIM Hyun Gyu[1], PHILLIPS Ben[2], PARK Soohyung[3], TUMESCHEIT Charlotte[1], KIM Sang Ah[1], HONG Heedeok[4], STEINEGGER Martin[1], IM Wonpil[3], MILLER Elizabeth[2], CHOI Hee-Jung[1], YOON Tae-Young[*1] ([1]Seoul National University, [2]Laboratory of Molecular Biology, Medical Research Council, [3]Departments of Biological Sciences and Chemistry, Lehigh University, [4]Department of Chemistry and Department of Biochemistry & Molecular Biology, Michigan State University)

**B1.07***

**ALICE실험 FoCal 검출기에 사용할 PIN구조를 갖는 실리콘 센서의 양성자 빔에 의한 손상 평가** / KIM Dong Geon[1], NOH Ikje[2], PARK Tea Yong[3], KIM Yong Kyun[*1], KIM Yoonseok[2,3], HAN Younghoon[3], KWON Yungil[3] ([1]Department of Nuclear Engineering, Hanyang University, [2]Department of Basic

Science, Republic of Korea Naval Academy, [3]Dept. of Physics, Yonsei University)

**B2.01***

**Constructing the general three-point vertices effectively** / JEONG Jae Hoon[*1], CHOI Seong Youl[1] ([1]physics, Chonbuk National University)

**B3.06***

**MC-based feasibility study of a new sampling calorimeter for measuring the γ incident angle** / KIM Junlee[*1], KIM Eun-Joo[1], KIM YoungJun[2], AHN JungKeun[2], LIM GeiYoub[3] ([1]Division of Science Education, Jeonbuk National University, [2]Dept. of Physics, Korea University, [3]IPNS, High Energy Accelerator Research Organization, KEK)

**B3.09***

**Simulation of active target time projection chamber for LAMPS experiment** / LEE Seunghwan[1], KIM Yongsun[*1] ([1]Sejong University)

**B8.03***

**Electric field induced anomalous Hall effects and nematic phases in carrier doped rhombohedral trilayer graphene** / PARK Youngju[1], MACDONALD Allan H.[3], JUNG Jeil[*1,2] ([1]Dept. of Physics, University of Seoul, [2]Department of Smart Cities, University of Seoul, [3]Dept. of Physics, The University of Texas at Austin, USA)

**B9.04***

**Characterization of magnetic interactions using a single atomic sensor in a tunnel junction** / KIM Jinkyung[1,2], JANG Won-jun[3], BUI Hong Thi[1,2], CHOI Deung-Jang[5,6,7], WOLF Christoph[1,4], DELGADO Fernando[8], CHEN Yi[1,4], KRYLOV Denis[1,4], LEE Soonhyeong[1,4], YOON Sangwon[1,4], LUTZ Christopher[9], HEINRICH Andreas[*1,2], BAE Yujeong[*1,2] ([1]Center for Quantum Nanoscience, IBS, [2]Dept. of Physics, Ewha Womans University, [3]Nano Electronics, Samsung Advanced Institute of Technology, [4]Ewha Womans University, Ewha Womans University, [5]Centro de Física de Materiales, CFM/MPC (CSIC-UPV/EHU), [6]Dept. of Physics, Donostia International Physics Center (DIPC), [7]Basque Foundation for Science, Ikerbasque, [8]Dept. of Physics, Instituto de estudios avanzados IUDEA, [9]Almaden Research Center, IBM)

**B12.03***

**Polarized-Raman scattering study of methylammonium ion orientation in hybrid halide perovskite $CH_3NH_3PbCl_3$ single crystals** / YOON Seokhyun[*1], KIM Yejin[1], BAE Soungmin[2], PARK Joohee[1], NGUYEN Trang Thi Thu[3], JUNG Hyeri[1], JO William[1], KIM Yong-Hoon[4], RAEBIGER Hannes[2] ([1]Dept. of Physics, Ewha Womans University, [2]Dept. of Physics, Yokohama National University, [3]Dept. of Physics, Danang University of Science and Technology, [4] School of Electrical Engineering, KAIST)

**B13.04***

**Does revisit help target search on complex networks?** / JEONG Hawoong[*1,2], SON Gangmin[1], BAE Youngkyoung[1] ([1]Dept. of Physics, KAIST, [2]Center for Complex Systems, KAIST)

**B19.02***

**Effects of laser irradiation on two-dimensional $Bi_2Te_3/MoS_2$** / LEE Taegeon[1], AHN Ji-Hoon[2], RHO Heesuk[*1] ([1]Dept. of Physics, Jeonbuk National University, [2]Department of Materials Science and Chemical Engineering, Hanyang University)

**C3.06***

**Study on the flow of the identified particles in p-Pb collisions** / JI SuJeong[*1], LIM SangHoon[1] ([1]Dept. of Physics, Pusan National University)

**C3.08***

**Heavy-flavor and quarkonia measurements with ALICE 3** / SEO Jinjoo[*1] ([1]Dept. of Physics, Inha University)

**C12.04***

**Observation of Biexcitons in Three-Dimensional Halide Perovskite Single Crystals** / RYU Hongsun[1], PARK Jeehong[2], YI Yeonjin[*2], JANG Joon Ik[*1] ([1]Physics, Sogang University, [2]Dept. of Physics, Yonsei University)

**C13.03***

**Multiple phase transitions at interface induced by orientational interaction** / PARK Myeonggon[1,2], GRANICK Steve[*1,3] ([1]Center for Soft and Living Matter, IBS, [2]Dept. of Physics, UNIST, [3]Department of Chemistry, UNIST)

**C19.03***

**Ultrathin CdS-anchored MOCVD-grown Hierarchical ZnO-Si Nanowires for Improved Photoelectrochemical Water Splitting** / BAGAL Indrajit V.[1], RYU Sang Wan[*1] ([1]Dept. of Physics, Chonnam National University)

**C19.04***

**Enhanced Photoelectrochemical water splitting performance of Au- Nanoparticles decorated gallium nitride photoanode** / RYU Sang Wan[*1], ABDULLAH Ameer[1] ([1]Dept. of Physics, Chonnam National University)

**D3.04***

**Study of jet measurements with a dual-readout calorimeter for the EIC** / RYU Jaehyeok[*1], KIM Yongjun[1], LIM Sanghoon[1], KO Sanghyun[1,2], KIM Doyeong[3], LEE Hyupwoo[2,3], LEE Jason[3], LEE Yunjae[3], SON Youngwan[3], SONG Donghyun[3], WATSON Ian[3], CHO Guk[4], EO Yun[4], HA Seungkyu[4], HWANG

Kyuyeong[4], KIM Dongwoon[4], KIM Jaeyoung[4], KIM Kyungho[4], KIM Sungwon[4], KIM Tongil[4], PARK Junewoo[4], WATANUKI Shun[4], YOO Hwidong[4], CHOEN Yechan[5], KIM Yongsun[5], HUH Changgi[6], KIM Bobae[6], LEE Junghyun[6], LEE Sehwook[6], RYU Min Sang[6] ([1]Dept. of Physics, Pusan National University, [2]Dept. of Physics, Seoul National University, [3]Dept. of Physics, University of Seoul, [4]Dept. of Physics, Yonsei University, [5]Dept. of Physics, Sejong University, [6]Dept. of Physics, Kyungpook National University)

**D9.03***

**Quantum capacitance of vertical tunnel field-effect transistors: A first-principles study** / LEE Ryong-Gyu[1], LEE Juho[1], KIM Tae Hyung[1], KIM Yong-Hoon[*1] ([1]School of Electrical Engineering, KAIST)

**D9.05***

**Berry curvature imprinted in pumped photoemission delay** / PARK Hyosub[1], LEE JaeDong[*1] ([1]Department of Emerging Materials Science, DGIST)

**D15.07***

**Charge and energy confinement of strongly coupled plasma within a phase-coexisting supercritical fluid** / LEE Juho[1], LEE Seungtaek[1], YUN GUNSU[*1,2] ([1]Dept. of Physics, POSTECH, [2]Division of Advanced Nuclear Engineering, POSTECH)

**D16.05***

**고출력 1018nm Yb첨가 광섬유 MOPA 시스템** / KIM Ji Won[*1], PARK Hyemi[1], OH Ye Jin[1], PARK Eun-jee[2], PARK Jong seon[1,3], KIM Jin-pil[1], JEONG Hoon[3] ([1]Department of photonics and nanoelectronics, Hanyang University ERICA, [2]Department of Applied Physics, Hanyang University ERICA, [3]한국생산기술연구원 KITECH)

**E2.01***

**Islands in charged linear dilaton black holes** / AHN Byoungjoon[1], BAK Sang-Eon[1], JEONG Hyun-Sik[2,3], KIM Keun Young[*1], SUN Ya-Wen[2,3] ([1]Physics, GIST, [2]School of physics & CAS Center for Excellence in Topological Quantum Computation, University of Chinese Academy of Sciences, [3]Kavli Institute for Theoretical Sciences, University of Chinese Academy of Sciences)

**E4.08***

**Simulation of Gravitational Wave Detection Using Intensity Interferometer for the Stellar Interferometer Experiment** / HONG Gihan[1], RHO Chang Dong[2], LEE Chang-Hwan[3], WON Eunil[4], PARK IL Hung[*1], HWANG Jungseek[1], CHOI Ki-young[1], LEE Kwangho[1] ([1]Physics, Sungkyunkwan University, [2]physics, University of Seoul, [3]physics, Pusan National University, [4]Physics, Korea University)

**E9.02***

**Ab initio prediction of topological superconductivity in metallic Si allotropes** / KANG Yoon-Gu[1],

LEE In-Ho[2], HAN Myung Joon[*1], CHANG Kee Joo[*1] ([1]Dept. of Physics, KAIST, [2]Korea Research Institute of Standards and Science, KRISS)

**E9.07***

**First-principles study of the chemically reversible isomerization of cadmium sulfide nanoclusters** / SHIM Doeun[1], LEE Juhyung[1], KANG Joongoo[*1] ([1]Department of Emerging Materials Science, DGIST)

**E12.03***

**Mixed-halide Zero-dimensional Perovskites Synthesized via Mechanochemistry for Visible Emission Over a Wide Color Spectrum** / LIM Hyungbin[1], BAEK Kyeong-Yoon[1], KIM Jaeyoung[1], LEE Jonghoon[1], LEE Woocheol[1], AHN Heebeom[1], KIM Junwoo[1], KANG Keehoon[*2], LEE Takhee[*1] ([1]Dept. of Physics and Astronomy, Seoul National University, [2]Department of Materials Science and Engineering, Yonsei University)

**E13.06***

**Giant Charge Reconstruction in Lipid Vesicles : Optical Bottle Study** / LEE Jaehee[1], GIM Bopil[1], PARK Seongmin[2], PARK Chang Young[3], JANG Hyunwoo[1], LEE Suho[1], JEONG Dae-Woong[1], OU-YANG H Daniel[4], KIM Mahn Won[2], KIM Joon Heon[5], KWON Suyong[6], HYEON Changbong[7], CHOI Myung Chul[*1] ([1]Department of Bio and Brain Engineering, KAIST, [2]Dept. of Physics, KAIST, [3]R&D Center, LG Hausys, [4]Dept. of Physics, Lehigh University, [5]Advanced Photonics Research Institute, GIST, [6]Division of Policy and Strategy, KRISS, [7]School of Computational Science, Korea InstiKorea Institute for Advanced Studytute for Advanced Study)

**E16.02***

**Study of second-order optical nonlinearity in twisted few-layer graphene** / YEOM Dong-Il[*2,3], CHOI Jungseok[3], HA Seongju[3], CHAE Kwanbyung[3], PARK Ji-Yong[2,3] ([1]Ajou University, [2]Dept. of Physics, Ajou University, [3]Department of Energy Systems Research, Ajou University)

**E19.03***

**Near-Field Photoluminescence Control of Intra- and Inter-Layer Excitons in $WSe_2/Mo_{0.5}W_{0.5}Se_2$ Heterobilayer** / KOO Yeonjeong[1], LEE Hyeongwoo[1], LEE Dong Yun[1], KRAVTSOV Vasily[2], PARK Kyoung-Duck[*1] ([1]Physics, UNIST, [2]Physics and Engineering, ITMO University, Russia)

**F1.01***

**Particle identification for Dual-Readout calorimeter** / LEE YunJae[1], LEE Jason Sang Hun[*1], WATSON Ian James[1], LEE Hyupwoo[1], SONG Donghyun[1], KIM Doyoung[1], SON Youngwan[1], YOO Hwidong[2], HA Seungkyu[2], KIM Kyungho[2], CHO Guk[2], LEE Sehwook[3], RYU Min Sang[3], KO Sanghyun[4], KIM Bobae[3], HUH Changgi[3], EO Yun[2], HWANG Kyuyeong[2], KIM Dongwoon[2], KIM Jaeyoung[2], KIM Sungwon[2], KIM Tongil[2], PARK Junewoo[2], CHOEN Yechan[5], KIM Yongsun[5], LIM Sanghoon[6], RYU Jaehyeok[6] ([1]Dept. of

Physics, University of Seoul, [2]Dept. of Physics, Yonsei University, [3]Dept. of Physics, Kyungpook National University, [4]Dept. of Physics, Seoul National University, [5]Dept. of Physics, Sejong University, [6]Dept. of Physics, Pusan National University)

**F1.07***

**Migration of the dual-readout calorimeter simulation to Key4HEP common software stack for future HEP collider experiments** / YOO Hwidong*[6], KO Sanghyun[3], HUH Changgi[1], KIM Bobae[1], LEE Junghyun[1], LEE Sehwook[1], RYU Minsang[1], KIM Doyeong[5], LEE Hyupwoo[5], LEE Jason[5], LEE Yunjae[5], SON Youngwan[5], SONG Donghyun[5], WATSON Ian James[5], CHO Guk[6], EO Yun[6], HA Seungkyu[6], HWANG Kyuyeong[6], KIM Dongwoon[6], KIM Jaeyoung[6], KIM Kyungho[6], KIM Sungwon[6], KIM Tongil[6], PARK Junewoo[6], WATANUKI Shun[6], CHOEN Yechan[4], KIM Yongsun[4], KIM Yongjun[2], LIM Sanghoon[2], RYU Jaehyeok[2] ([1]Dept. of Physics, Kyungpook National University, [2]Dept. of Physics, Pusan National University, [3]Dept. of Physics and Astronomy, Seoul National University, [4]Dept. of Physics, Sejong University, [5]Dept. of Physics, University of Seoul, [6]Dept. of Physics, Yonsei University)

**F2.09***

**Neutrino Event Reconstruction in the KNO Detector** / YU Seonghyeon*[1], YU Intae[1], KWON Eunhyang[1], SEO Jiwoong[1], KIM Kihoon[1], KIM Hyunsoo[2], JANG Jeeseung[3], LEE Youngmin[4], SHIN Bokkyun[5] ([1]Dept. of Physics, Sungkyunkwan University, [2]Dept. of Physics and Astronomy, Sejong University, [3]Dept. of Physics and Photon Science, GIST, [4]Dept. of Physics, KAIST, [5]Dept. of Physics, UNIST)

**F6.04***

**A thin defective layer formation in yttria-stabilized zirconia and its ferromagnetism** / RYU Sangkyun[1], CHO Daegill[1], PARK Jun Kue[2], LEE Jae S.[2], HONG Tae Eun[3], BYEON Mirang[3], JEEN Hyoung Jeen*[1,4] ([1]Dept. of Physics, Pusan National University, [2]Korea Multi-Purpose Accelerator Complex, KAERI, [3]Busan Center, KBSI, [4]Research Center for Dielectric and Advanced Matter Physics, Pusan National University)

**F7.01***

**Electrocatalytically-relevant depth in atomically precise $La_{0.7}Sr_{0.3}MnO_3$ heterostructures** / LEE Jegon[1], ADIGA Prajwal[2], LEE Sang A[3], NAM Seung Hyun[1], JU Hyeon-Ah[4], JUNG Min-Hyong[4], JEONG Hu Young[5], KIM Young-Min[4], WONG Cindy[2], ELZEIN Radwan[2], ADDOU Rafik[2], STOERZINGER Kelsey A.[2,6], CHOI Woo Seok*[1] ([1]Physics, Sungkyunkwan University, [2]School of Chemical, Biological and Environmental Engineering, Oregon State University, [3]Dept. of Physics, Pukyong National University, [4]Department of Energy Science, Sungkyunkwan University, [5]Central research Facilities and School of Materials Science and Engineering, UNIST, [6]Physical Sciences Division, Pacific Northwest National Laboratory)

**F7.04***

**Exploring surface chemical states of Pt-based bimetallic alloys (M=Ti,V) during CO oxidation by ambient pressure XPS** / JUNG Moonjung[1], KIM Dongwoo[1], LIM Hojoon[1], SEO Minsik[1], KANG Habin[1], KIM Seunghwan[1], KIM Geonhwa[2], PéREZ RAMíREZ Lucía[3], BOURNEL Fabrice[4,5], GALLET Jean-Jacques[4,5], KIM Ki-Jeong[2], MUN Bongjin Simon[*1,6] ([1]Dept. of Physics and Photon Science, GIST, [2]Beamline Research Division, Pohang Accelerator Laboratory, [3]CNRS, Sorbonne Université, France, [4]CNRS, Sorbonne Université, France, [5]Beamline Research Division, Synchrotron SOLEIL, [6]Center for Advanced X-ray Science, GIST)

**F9.01***

**Decoherence of nitrogen-vacancy spin ensembles in diamond in the nitrogen electron-nuclear spin bath** / PARK Huijin[1], LEE Junghyun[2], OH Sangwon[3], JEONG Ha-young[2], HAN Sangwook[2], SEO Hosung[*1] ([1]Physics, Ajou University, [2]Center for Quantum Information, KIST, [3]Quantum magnetic imaging, KRISS)

**F9.06***

**Anisotropic Orbital Hybridization induced Breathing Kagome Lattice and Higher Order Topology in Monolayer Hexagonal Transition Metal Dichalcogenides** / JUNG Jun[1], KIM Yong-Hyun[*1,2] ([1]Dept. of Physics, KAIST, [2]Graduate School of Nanoscience and Technology, KAIST)

**F15.01***

**IRE Prediction Using Visible Fast Camera Images in VEST** / HWANG Yong Seok[*1], JUNG Eui Chan[1], JEONG Won Ik[1], NA Yong-Su[1] ([1]Seoul National University)

**F15.04***

**Gyrokinetic simulation studies of ExB staircase in KSTAR L-mode plasmas** / KANG Byungjun[*1], QI Lei[3], SEO JangHoon[2], HAHM TaikSoo[1] ([1]Energy system engineering department, Seoul National University, [2]시뮬레이션연구팀, KFE, [3]이론해석연구팀, KFE)

**G1.08***

**Performance of the PF hadron calibration algorithm for Run III at CMS experiments** / HUH Changgi[*1], LEE Sehwook[1] ([1]Dept. of Physics, Kyungpook National University)

**G1.09***

**Update of Herwig 7 for BSM radiations and search for the radiated BSM particle inside jets** / LEE Joon-Bin[1], YANG Un-ki[*1] ([1]Dept. of Physics and Astronomy, Seoul National University)

**G2.04***

**Update on dark matter searches using annual modulation in NaI crystals at COSINE-100** / NEAL Robert John[*1] ([1]Centre for Underground Physics, IBS)

**G3.08***

**Charmonium spectrum from the instanton vacuum** / HONG Ki-Hoon[1], KIM Hyun-Chul[*1], YAKHSHIEV Ulugbek[1] ([1]Inha University)

**G7.04***

**Flat bands with band crossings enforced by symmetry representation** / HWANG Yoonseok[1,2], RHIM Jun-Won[1,2,3], YANG Bohm Jung[*1,2] ([1]Center for Correlated Electron Systems (CCES), Institute of Basic Science (IBS), [2]Dept. of Physics and Astronomy, Seoul National University, [3]Dept. of Physics, Ajou University)

**G7.08***

**Non-divergent chiral charge pumping in Weyl Semimetal** / PARK Min Ju[1], CHEON Suik[1], LEE Hyun-Woo[*1] ([1]Dept. of Physics, POSTECH)

**G9.01***

**Pushing the limit of crystal structure prediction with machine learning potential: a first extensive blind test** / KANG Sungwoo[1], JEONG Wonseok[1], HWANG Seungwoo[1], HONG Changho[1], YOON Youngchae[1], LEE Jiho[1], HAN Seung Wu[*1] ([1]Seoul National University)

**G9.07***

**First-principles calculation of the non-equilibrium quasi-Fermi levels in $WSe_2$ p-n junctions** / KIM Tae Hyung[1], LEE Juho[1], KIM Yong-Hoon[*1] ([1]School of Electrical Engineering, KAIST)

**G10.02***

**Effective Work-function Tuning in Metal/$SiO_2$/Si Junction Achieved with Graphene Interlayer at Metal/$SiO_2$ Interface** / SONG Wonho[1], LEE Jung-Yong[2], KIM Junhyung[1], PARK Jinyoung[1], JO Jaehyeong[1], HYUN Eunseok[1], PARK Kibog[*1,3] ([1]Dept. of Physics, Ulsan National Institute of Science and Technology (UNIST), [2]Quantum Information Research Support Center, Sungkyunkwan University, [3]Department of Electrical Engineering, Ulsan National Institute of Science and Technology (UNIST))

**G10.05***

**Spin-Orbit Interaction and Magnetoresistance in Graphene-based Heterostructures** / KIM Tae Hee[*1,2], DO THI Nga[1,2], JANG Youngrok[4], CHANG Changyong[3] ([1]Dept. of Physics, Ewha Womans University, [2]Quantum Nanosciences, IBS, [3]Dept. of Physics, Incheon National University, [4]Quantum Spin Team, KRISS)

**G11.01***

**Modulating ferromagnetic insulating state in $LaCoO_3$ epitaxial thin films using surface orientation control** / SHIN Dongwon[1], SONG Sehwan[2], YOON Sangmoon[3], LEE Ho Nyung[3], PARK Sungkyun[2], CHOI Woo Seok[*1] ([1]Physics, Sungkyunkwan University, [2]Physics, Pusan National

University, [3]Materials Science and Technology Division, Oak Ridge National Laboratory, USA)

**G12.01***

**Tailoring the interfacial band offset by the molecular dipole orientation for a molecular heterojunction selector** / EO Jung Sun[1], SHIN Jaeho[1], YANG Senghoon[1], JEON Takgyeong[1], LEE Jaeoho[1], CHOI Sanghyun[1], LEE Chul-ho[1], WANG Gunuk*[1] ([1]KU-KIST Graduate School of Converging Science and Technology, Korea University)

**G12.05***

**Aging Lévy walk with rest model for Arc and β-actin mRNA transport in neurons** / AHN Hye Rim[1], DURANG Xavier[2], SHIM Jae Youn[1], PARK Gaeun[1], JEON Jae-Hyung*[2], PARK Hyeyoon*[1] ([1]Dept. of Physics and Astronomy, Seoul National University, [2]Dept. of Physics, POSTECH)

**G17.02***

**Coherent and incoherent oscillation of the spin spiral state near the quantum critical point** / HUH Seung Jung[1], KIM Kyungtae[1], KWON Kiryang[1], HUR Junhyeok[1], CHOI Jae Yoon*[1] ([1]Dept. of Physics, KAIST)

**G19.06***

**Investigation of Cation Exchange Behaviors of FAMA$PbI_3$ Films using Dynamic Spin-Coating** / JEONG Mun Seok*[1], YU Hyangmi[2] ([1]Dept. of Physics, Hanyang University, [2]Dept. of energy science, Sungkyunkwan University)

**H1.03***

**Search for new physics in dilepton events using asymmetry** / YANG Un-ki*[1], SEO HyonSan[1], JUN Won[1], JEON Si Hyun[1], LEE Sang Eun[1] ([1]Dept. of Physics and Astronomy, Seoul National University)

**H2.03***

**A Study on the Responses of Silicon Photodiode Detector to Gamma Radiation and Proton beams** / KIM Bobae*[1], KIM Sunghwan[2], NAM Uk-Won[3], YOUN Sukwon[4], PARK Won-Kee[3], SHON Jongdae[3], KIM HongJoo[1], PARK Hwanbae[1], HWANG Junga[3], YE Seongjun[4], CHOI Young-Jun[3] ([1]Kyungpook National University, [2]Dept. of Radiology, Cheongju University, [3]Space Science Division, Korea Astronomy and Space Science Institute, [4]Dept. of Applied Bioengineering, Seoul National University)

**H8.01***

**Artificial Phonon Engineering in Atomically-Designed Oxide Heterostructures** / JEONG Seung Gyo[1], SEO Ambrose[2], CHOI Woo Seok*[1] ([1]Physics, Sungkyunkwan University, [2]Physics and Astronomy, University of Kentucky, USA)

**H8.05***

**Non-volatile 180° polarization reversal dynamics of ferroelastic nanodomains in $Pb(Zr,Ti)O_3$ thin film** / CHOI Je Oh[1], LEE Hyeon Jun[2,3], WANG Bo[4], FUNAKUBO Hiroshi[5], LEE Su Yong[6], CHEN Long-Qing[4], JO Ji Young[*1] ([1]School of Materials Science and Engineering, GIST, [2]Center for Correlated Electron Systems, Institute for Basic Science, [3]Dept. of Physics and Astronomy, Seoul National University, [4]Department of Materials Science and Engineering, Pennsylvania State University, [5]Department of Materials Science and Engineering, Tokyo Institute of Technology, [6]Pohang Accelerator Laboratory, Pohang University of Science and Technology)

**H17.04***

**Rydberg quantum tree wires for vertex-spitting in high-degree graphs** / HWANG Jaeyong[1], KIM Minhyuk[1], KIM Kangheun[1], MOON Eun-Gook[1], AHN Jaewook[*1] ([1]Dept. of Physics, KAIST)

**I3.02***

**Measurement of proton decay from energy levels in $^{21}Na$** / KIM Min Ju[1], CHAE K. Y.[*1], AHN S[2], BARDAYAN D W[3], CHA S.M.[1], CHIPPS K. A.[2,4,5], CIZEWSKI J. A.[6], HOWARD M. E.[6], KOZUB R. L.[7], KWAK K.[8], MANNING B.[6], MATOS M.[9], O'MALLEY P. D.[3,6], PAIN S. D.[5], PETERS W. A.[10], PITTMAN S. T.[5], RATKIEWICZ A.[6], SMITH M. S.[5], STRAUSS S.[3,6] ([1]Dept. of Physics, Sungkyunkwan University, [2]Physics and astronomy, University of Tennessee, Knoxville, [3]physics, University of Notre Dame, [4]Dept. of Physics, Colorado School of Mines, [5]Physics Division, Oak Ridge National Laboratory, [6]Physics and Astronomy, Rutgers University, [7]Physics, Tennessee Technological University, [8]Physics, UNIST, [9]Physics, Louisiana state university, [10]Physics, Oak Ridge Associated Universities)

**I20.05***

**Revealing the Formation of IDR (Intrinsically Disordered Region)-mediated PD1 Nanoclusters** / EUN GeeSung[1], YOON Tae-Young[*1] ([1]Seoul National University)