

List of Posters - Session F1 - Friday 5:40PM-7:00PM Mark Twain Ballroom (Memorial Union)

American Physical Society

Prairie Section

Fall 2013 Meeting

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| | F1.00001 | <i>Detection of Rare Molecular Transitions in a Sample of Massive Star Forming Regions</i> | LI LEE, ESTEBAN D. ARAYA | Western Illinois University |
| New | F1.00002a | <i>Studying TGE's Using Fixed Land-Based Detectors</i> | E. Bell, A. Keller, Z. Monti, B. Shannon, C. Turner, R. Williams and C. Fasano | Monmouth College |
| New | F1.00002b | <i>Calibration of Neutrino Detector Via the Decay of Cosmic Muons</i> | Emily Bell | Monmouth College |
| | F1.00003 | <i>Optical absorption properties of Neodymium ions (Nd³⁺) doped lead boro tellurite glasses</i> | KINNARY PATEL, P.K. BABU, SAISUDHA MALLUR | Western Illinois University |
| | F1.00004 | <i>Direct calculation of exciton binding energies with time-dependent density-functional theory</i> | ZENGHUI YANG, CARSTEN ULLRICH | University of Missouri |
| | F1.00005 | <i>Molecular Dynamics Simulations of Melting of Nitromethane Initiated at Crystal-Rare Gas Interfaces</i> | GANESH KAMATH, ALI SIAVOSH-HAGHIGHI, THOMAS SEWELL, DONALD THOMPSON | University of North Texas, University of Missouri |
| | F1.00006 | <i>Generalized Stacking Fault Energies in the Basal Plane of Triclinic Molecular Crystal 1,3,5-Triamino-2,4,6-Trinitrobenzene (TATB)</i> | NITHIN MATHEW, THOMAS SEWELL | University of Missouri |
| | F1.00007 | <i>Radial distribution function of liquid argon in modified hard sphere model</i> | MICHAEL KORTH, SAESUN KIM | Univ of Minn - Morris |
| | F1.00008 | <i>Effects of Annealing on the Structure and Properties of Mn_{5-x}Fe_xSi₃</i> | ZACHARY SPENCE, CODY DAWSON, PEGGY HILL, IGOR DUBENKO, ABDIEL QUETZ, NAUSHAD ALI | Southeast Missouri State University, Southern Illinois University-Carbondale |
| | F1.00009 | <i>Missing Material At The Buried Interface For Ag/Si(111)7x7 Thin Films Deposited at Glancing Angle</i> | S.T. HAYDEN, YIYAO CHEN, M.W. GRAMLICH, R.S. GARI, G.M. KING, P.F. MICELI | University of Missouri, University of Massachusetts - Amherst |
| | F1.00010 | <i>Boron Doping of Activated Carbon</i> | MATTHEW CONNOLLY, ALEXANDER ST. JOHN, MATTHEW BECKNER, PETER PFEIFER, CARLOS WEXLER | University of Missouri |
| | F1.00011 | <i>Fabrication and characterization of single-supported bilayer membranes of anionic lipids</i> | ANDREW MISKOWIEC, MENGJUN BAI, HASKELL TAUB, FLEMMING HANSEN | University of Missouri, Technical University of Denmark |

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| F1.00012 | <i>Interfacial structure and morphology of nano-crystalline Ag on Si(111)7x7: an in-situ x-ray scattering study</i> | YIYAO CHEN, M.W. GRAMLICH, S.T. HAYDEN, M.C. TRINGIDES, P.F. MICELI, | University of Missouri, Iowa State University |
| F1.00013 | <i>Spin-Orbit Interaction and Rashba Effect in the 2D metal dichalcogenides</i> | MOHAMMAD MAHDI VALIZADEH, SHANAVAS K. VEEDU, SASHI SATPATHY | University of Missouri |
| F1.00014 | <i>Magnetic and Magnetocaloric Properties of MnFe₄Si_{3-x}In_x</i> | CODY DAWSON, ZACHARY SPENCE, P. HILL, IGOR DUBENKO, ABDIEL QUETZ, NAUSHAD ALI | Southeast Missouri State University, Southern Illinois University - Carbondale |
| F1.00015 | <i>Forbidden Reflections and Interference Effects in X-ray Reflectivity from Si(111)7x7</i> | J.W. KREMENAK, YIYAO CHEN, S.T. HAYDEN, M.W. GRAMLICH, P.F. MICELI | University of Missouri, University of Massachusetts - Amherst |
| F1.00016 | <i>Scaling analysis of the magnetic field-tuned quantum phase transition in superconducting amorphous Pb films</i> | NICHOLAS OLSON, ASHWANI KUMAR | Monmouth College |
| F1.00017 | <i>Probing charge transfer complex (CTC) states in organic solar cells using photocurrent spectroscopy</i> | DHANASHREE MOGHE, PING YU, CATHERINE KANIMOZHI, SATISH PATIL, SUCHISMITA GUHA | University of Missouri |
| F1.00018 | <i>Single Molecule Relaxation in Crystalline Nitromethane</i> | LUIS RIVERA-RIVERA, ALI SIAVOSH-HAGHIGHI, THOMAS SEWELL, DONALD THOMPSON | University of Missouri |
| F1.00019 | <i>Theoretical determination of anisotropic thermal conductivity for crystalline 1,3,5-triamino-2,4,6-trinitrobenzene (TATB)</i> | MATTHEW KROONBLAWD, THOMAS SEWELL | University of Missouri |
| F1.00020 | <i>Concentration-dependent embedded atom method potential for Al-Cu system</i> | SULEIMAN OLORIEGBE, SEWELL THOMAS, THOMPSON DONALD, ZHEN CHEN, SHAN JIANG, YONG GAN | University of Missouri |
| F1.00021 | <i>Rotational -Vibrational Energy Transfer in OH(v,J)+ Ar at High Pressures</i> | REZVAN CHITSAZI, DONALD THOMPSON | University of Missouri |

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| F1.00022 | <i>A Study of the Effects of Basis Functions in Interpolating Moving Least Squares Methods for Fitting Potential Energy Surfaces</i> | YI SHI, DONALD THOMPSON | University of Missouri |
| F1.00023 | <i>Super-resolved Microscopy via Coherent Population Oscillations</i> | KISHOR KAPALE, GIRISH AGARWAL | Western Illinois University, Oklahoma State University |
| F1.00024 | <i>A DFT and Ab Initio Study of the Thermal Decomposition of 1,3,3-Trinitroazetidine (TNAZ)</i> | JEFFREY VEALS, DONALD THOMPSON | University of Missouri |
| F1.00025 | <i>Controlled Focusing Properties with Cylindrical Vector Beams</i> | MAOJIN YUN, LIFENG DONG, WEI LV | Missouri State University, Qingda University |
| F1.00026 | | | |
| F1.00027 | <i>Effect of Potentiator VX-770 on the Kinetics of Disease-Associated Mutant CFTR Channels</i> | ZULEYHA YUK-SEK, ZOIA KOPEIKIN, SILVIA BOMPADRE, | University of Missouri |
| F1.00028 | <i>The Isolated Nucleotide Binding Domains of CFTR Form Bipartate ATPase To Regulate ATP Consumption</i> | MARK PALMIER, SILVIA BOMPADRE | University of Missouri |
| F1.00029 | <i>Monitoring the uniformity of alpha helices in lipophilic environments</i> | ANAHITA ZARE, JIAN XIONG, JASON COOLEY, RENEE JIJI | University of Missouri |
| F1.00030 | <i>Structured mRNA induces the ribosome into a hyper-rotated state</i> | PETER CORNISH, PEIWU QIN, DONGMEI YU, XIAOBING ZUO | University of Missouri |
| F1.00031 | | | |
| F1.00032 | <i>Development of quantum mechanics laboratory for undergraduate teaching</i> | HARRISON KNOLL, PAUL MICELI, PING YU | University of Missouri |
| F1.00033 | <i>Opposite Thought Experiment</i> | LORENTIN SMARANDACHE | University of New Mexico |
| F1.00034 | <i>Hierarchical micro/nanostructure effect on the thermal performance of oscillating heat pipes</i> | FENG ZHANG, ROBERT WINHOLTZ, VITALY GRUZDEV, HONGBIN MA | University of Missouri |
| F1.00035 | <i>Photovoltaic Properties of Electrochemical Deposited Cu₂O/ZnO p-n Hetero junction</i> | MINGWEI SHANG, LIFENG DONG | Qingdao University of Science and Technology |
| F1.00036 | <i>The Paradox of Special vs. General Theory of Relativity</i> | FLORENTIN SMARANDACHE | University of New Mexico |
| F1.00037 | <i>Crustal Structure Beneath the Ozark Plateau and Illinois Basin using the OIINK Flexible Array</i> | JOSHUA RUSSELL, HERSH GILBERT, GARY PAVLIS | University of Missouri, Purdue University, Indiana University |

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| F1.00038 | <i>Neutron Diffraction of Li-Ion Battery Electrode Materials</i> | TYLER FEARS, HELMUT KAISER, HASKELL TAUB | Missouri University of Science and Technology, University of Missouri |
| F1.00039 | <i>The Nuts and Bolts of Running a Graduate Student-Led Science Outreach Program</i> | MATTHEW MCCUNE, DEEPIKA MENON, KEVIN TARWATER, CHRISTOPHER OWENS | University of Missouri |
| F1.00040 | <i>Generation of N-particle Dicke-Class States and their Application to Quantum Information Processing</i> | DANIEL DEYOUNG, KISHOR KAPALE | Western Illinois Univ |
| F1.00041 | <i>Kitchen inspired nanochemistry: dispersive, exfoliation and hybridization of functional MoS2 nanosheets using culinary hydrocolloids</i> | UDHIR RAVULA, JEREMY B. ESSNER, GARY A. BAKER | University of Missouri |
| F1.00042 | | | |
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