

SURF Student Colloquium: Thursday - July 21, 2011
Special Session: Green Auditorium, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
1:30P	José Osorio	Universidad InterAmericana de Puerto Rico	The Study of Person Matching Algorithms for Healthcare	ITL

SURF Student Colloquium: Tuesday - August 2, 2011
Plenary Session: Green Auditorium, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
9:00A	Patrick Gallagher, NIST Director	National Institute of Standards & Technology	Welcome	NIST
MODERATOR: Robert Briber University of Maryland College Park				
9:15A	Sarice Barkley	St. Olaf College	Lateral Force Calibration Methods for Atomic Force Microscope	CNST
9:45A	Nathan Jacobson	Hood College	Access Control Policy Tool (ACPT)	ITL
10:15A	Taylor Myers	University of Maryland College Park	Validation of the Fire Dynamics Simulator	EL
10:45A	BREAK			
MODERATOR: MODERATOR: Robert Briber University of Maryland College Park				
11:00A	Bryce Robbins	Colorado School of Mines	Persistent Currents in a Rotating Toroidal BEC	PML
11:30A	Jennifer Au	University of Maryland College Park	Enzyme Digestion and Mass Spectral Characterization of Glycoproteins	MML/ Chemistry
12:00P	Danielle Gorka	University of New Haven	Quantitative Measurement of Enzyme Activity Loss on Biofunctionalized Gold Nanoparticles	MML/NCNR Matls Science
12:30	LUNCH - SURF Directors and External Visitors (Portrait Room)			

SURF Student Colloquium: Tuesday - August 2, 2011
 Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Beverly Hartline University of the District of Columbia				
2:30P	Julianne Casil	Converse College	pH Dependent Kinetics of Ion Channel Formation of <i>Bacillus anthracis</i> Protective Antigen 63 (PA63)	PML
2:50P	Brandon Benton	Georgia Southern University	Prototyping Method for Bragg-Type Atom Interferometers	PML
3:10P	John Villanova	Appalachian State University	Surface Topography Analyses for Images of Firing Pin Impressions Acquired via Confocal Microscopy	PML
3:30P	Andrew Hachtel	Miami University of Ohio	Fabrication and Characterization of a Nanoaperture Array by Helium Ion Microscope	PML
3:50P	Jeffrey Kleykamp	Miami University of Ohio	Simulation of Scanning Electron Microscope to Better Understand Errors in Cross-Correlation Image Correction Technique	PML
4:10P	END OF DAY			

SURF Student Colloquium: Tuesday - August 2, 2011
 Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Sivapatham Parmasivam Savannah State University				
2:30P	Cyril Draffin	Washington University in St. Louis	Standardizing Building Codes for Unpredictable Winds	EL
2:50P	Daniel Lu	Cornell University	FHS-LAB: A GUI for Simulating Structural Behavior Subjected to Fire	EL
3:10P	Brian Presser	State University of New York Binghamton	Energy Consumption and Lifecycle Cost of Buildings in the United States	EL
3:30P	Derrick Johnson	Western Kentucky University	A Pallet Planner	EL
3:50P	END OF DAY			

SURF Student Colloquium: Tuesday - August 2, 2011
 Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Jose Rodriguez InterAmerican University, Puerto Rico				
2:30P	Halley Coplin	Rensselaer Polytechnic Institute	Direct Browser Integration of 3D Graphics with X3D and X3DOM	ITL
2:50P	Gregory Herpel	St. Mary's College of Maryland	Analysis of a High Performance Flow of Suspensions	ITL
3:10P	Brady O'Connell	University of Maryland College Park	Cloud Interoperability: Migrate (Fully-Stopped) VMs from One Cloud-Provider to Another	ITL
3:30P	Nadezhda Serova	University of Maryland Baltimore County	Glass Shard Dynamics in Fire Visualization Simulation	ITL
3:50P	END OF DAY			

SURF Student Colloquium: Wednesday - August 3, 2011
Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Jack Chirlkjian Georgetown University				
9:00A	Varun Patel	Arizona State University	Oxidatively Induced DNA Damage Analysis of Shrimp Exposed to Conditions Resembling Those of the Deepwater Horizon Oil Spill	MML/NCNR Chemistry
9:20A	Jiemin Wu	University of Maryland College Park	Fabrication and Characterization of Carbohydrate-Functionalized Surfactant Vesicles	MML/NCNR Chemistry
9:40A	Caleb Porter	Weber State University	Investigation of Turmeric by Liquid Chromatography	MML/NCNR Chemistry
10:00A	Janice Lin	University of Maryland College Park	Stability of Terpene Gas Mixtures in Aluminum Cylinders	MML/NCNR Chemistry
10:20A	Blessing Deeyaa			MML/NCNR Chemistry
10:40A	BREAK			
MODERATOR: Timothy Brewer NIST Surface and Microanalysis Science Division				
10:50A	Laura Anzaldi	University of Maryland Baltimore County	Developing a Root-Based Semantic Vocabulary	MML/NCNR Chemistry
11:10A	Howie Joress	Johns Hopkins University	A Statistical Approach to EDS Peak Identification: A Proof of Concept	MML/NCNR Chemistry
11:30A	Caroline Bibb	University of Delaware	Standard for Lead and Cadmium Content in Polyvinyl Chloride	MML/NCNR Chemistry
11:50A	Melissa Halter	Mount St. Mary's University	Calibration of NIST VaporJet and Preliminary Evaluation of Explosive Trace Detectors	MML/NCNR Chemistry
12:10P	Naomi Bier	University of Maryland Baltimore County	Putting a <i>Spin</i> on Solid Sampling via Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS)	MML/NCNR Chemistry
12:30P	LUNCH			

SURF Student Colloquium: Wednesday - August 3, 2011
 Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Robert McMichael NIST Center for Nanoscale Science and Technology				
2:00P	Matthew Swisher	Carnegie Mellon University	Interferometer for the Measurement of a MEMS Device in an SEM	CNST
2:20P	Bryce Thurston	Colorado School of Mines	Frequency Conversion Through Four-Wave Mixing Bragg Scattering	CNST
2:40P	William Bowman	Arizona State University	Ionic Conductivity in Gadolinium and Praseodymium Doped and Co-Doped Cerias for Solid Oxide Fuel Cell Electrolytes	CNST
3:00P	Chris Baldwin	Carnegie Mellon University	Tight-Binding Analysis of Twisted Graphene Bilayers	CNST
3:20	Joseph Allen	Middlebury College	Nanoscale Electrochromic Patterning with a Lithium Focused Ion Beam	CNST
3:40P	END OF DAY			

SURF Student Colloquium: Wednesday - August 3, 2011
 Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Walter Lowe Howard University				
9:00A	Navneet Gill	University of Michigan Ann Arbor	Automation and Control of Variables in a Cryogenic Environment	MML/NCNR Matls Science
9:20A	Joshua Johnson	Colorado School of Mines	Rector Software Upgrades and Analysis of Test Stand Behavior	MML/NCNR Matls Science
9:40A	Andrew Tracer	Princeton University	Dataflow: A Web-Based Solution to Data Reduction	MML/NCNR Matls Science
10:00A	Brian Zakrzewski	Carnegie Mellon University	Photoinduced Magnetization in Prussian Blue Analogue Tri-layer Films	MML/NCNR Matls Science
10:20A	Theresa Ginley	Juniata College	Optimizing the Sputting Parameters for Permalloy Thin Films to Minimize Surface Roughness	MML/NCNR Matls Science
10:40A	BREAK			

SURF Student Colloquium: Wednesday - August 3, 2011
 Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Dan Neumann NIST Center for Neutron Research				
10:50A	Pavan Bhargava	University of Maryland College Park	Nafion and Platinum Degradation Studies with Thin-Film Fuel Cell Models	MML/NCNR Matls Science
11:10A	Christine Franzel	Agnes Scott College	The Effect of Tethering on the Glass Transition Temperature in Thin Polymer Films	MML/NCNR Matls Science
11:30A	Arielle Strong	Virginia Polytechnic Institute and State University	Structure and Dynamics of Peripheral Membrane Proteins	MML/NCNR Matls Science
11:50A	Nathan Jones	North Carolina State University	Optimization of Cell Growth in Minimal Media	MML/NCNR Matls Science
12:10P	Fay Crawshaw	James Madison University	Tether Lipid Molecules for High Precision Metrology of Integral Proteins	MML/NCNR Chemistry
12:30P	Aman Rahman	University of Maryland College Park	Diffusion Coefficient Calculation of Phospholipids on Membrane Bi-layer Enclosing Protocells via Matlab	MML/NCNR Matls Science
12:50P	LUNCH			

SURF Student Colloquium: Wednesday - August 3, 2011
 Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB
MODERATOR: John Cumings University of Maryland College Park				
2:00P	Lucas Carneiro	St. Mary's College of Maryland	Effects of Film Processing Parameters on Organic Photovoltaic Device Performance	MML/NCNR Matls Science
2:20P	Amanda Huon	University of the Sciences in Philadelphia	Modeling of the Transparency and Conductivity of Carbon Nanotube Networks	MML/NCNR Matls Science
2:40P	Lillian Johnson	University of Maryland Baltimore County	Nanofluidics of Polymer Chains Under Confinement	MML/NCNR Matls Science
3:00P	Kyle Slusarski	Loyola University Maryland	Roles of Atomic Force Microscopy and Nanoindentation in Building Metrological Foundations for Nanomechanical Property Testing	MML/NCNR Matls Science
3:20P	Khanh Nguyen	University of New Hampshire	Measuring Thermal Properties of Materials at High Heating Rates Using a Nanocalorimeter	MML/NCNR Matls Science
3:40P	Tristan Storz	Colorado School of Mines	Optical Femtocalorimeter	MML/NCNR Matls Science
4:00P	David Harvey	University of Maryland Baltimore County	The Role of Metrology in X-Ray Diffraction	MML/NCNR Matls Science
4:20P	END OF DAY			

SURF Student Colloquium: Wednesday - August 3, 2011
 Parallel Session: Lecture Room C, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Jose Rodriguez InterAmerican University, Puerto Rico				
10:50A	Errol Markland	City College of New York	Web Application Development on Computer Security Metadata	ITL
11:10A	Catherine Baker	DePauw University	Circuit Synthesis for Cryptographic Applications	ITL
11:30A	Eliezer Ferrá	InterAmerican University of Puerto Rico	Credential Revocation Service	ITL
11:50A	Kathryn Aloisio	Smith College	Atmospheric Abundances of Greenhouse Gases from Prehistoric to Current Times	ITL
12:10P	Lo-Hua Yan	University of Michigan Ann Arbor	Fourier Methods to Describe the Shape of Biological Cells	ITL
12:30P	LUNCH			

SURF Student Colloquium: Wednesday - August 3, 2011
Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Sivapatham Paramasivam Savannah State university				
9:00A	Catherine Ashley	University of Maryland College Park	Characterizing Dispersion and Degradation of Nanoparticle-Filled Polymer Coatings	EL
9:20A	Lisa Gurney	Brigham Young University	Mitigation of Set Time Delays in High-Volume Fly Ash Cement Pastes Through Fine Limestone Additions	EL
9:40A	Andrew Hewitt	North Carolina State University	Slow Crack Growth Resistance at the Micron Scale in High Density Polyethylene	EL
10:00A	Amy Langhorst	University of Michigan Ann Arbor	Degradation of Polyesters Used in Blast Resistant Glasses and Protective Glazing Systems	EL
10:20A	Lee Phuong	University of Maryland College Park	Long-term Durability of Polymeric Materials for Photovoltaic Applications: Chemical and Physical degradation of PMMA During UV Exposure	EL
10:40A	BREAK			

SURF Student Colloquium: Wednesday - August 3, 2011
 Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Sivapatham Paramasivan Savannah State University				
10:50A	Peter Willette	Rensselaer Polytechnic Institute	Residential Appliance Energy Research: Clothing Washers	EL
11:10A	Christopher Iglehart	University of Maryland Baltimore County	Residential Appliance Energy Research	EL
11:30A	Andrew Trettel	University of Maryland College Park	Concrete Rheometer Automation	EL
11:50A	Gautham Ragunathan	University of Illinois at Urbana Champaign	Laser Diode Interferometry	EL
12:10P	Tommy Ji	University of Maryland College Park	Solutions in Perception Challenge	EL
12:30P	LUNCH			

SURF Student Colloquium: Wednesday - August 3, 2011
 Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Paul Witherell NIST (ARRA Fellow)				
2:00P	David Westbrook	University of Maryland College Park	Web-Based User Interface for Sustainability Modeling and Optimization	EL
2:20P	Katelyn Weber	Montana State University	Software Development for Probabilistic Modeling and Uncertainty Quantification	EL
2:40P	Jeffrey Sze	University of Maryland College Park	Integrated Factory Operation and Building Science Simulation	EL
3:00P	Angel Rosado Rosado	Universidad InterAmericana de Puerto Rico Bayamon	Building the Graphic User Interface for the "Model-Based Testing Project"	EL
3:20P	Jessica Lopez	University of California Los Angeles	Development of Sustainability Measurement Tools and Methods for Manufacturing Enterprises	EL
3:40P	Daniel Ettehadieh	University of Maryland College Park	Sustainability Performance Analysis of a Water Bottling Facility	EL
4:00P	Anna D'Alessio	University of Delaware	Research Contributions to Enhance the Sustainability Standards Portal	EL
4:20P	END OF DAY			

SURF Student Colloquium: Wednesday - August 3, 2011
Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Daniel Hussey, NIST Ionizing Radiation Division Uwe Arp, NIST Electron & Optical Physics Division				
9:00A	Ethan Lowery	The College of William and Mary	Constructing a Cryogenic Dipper for Tunneling Magnetoresistance Measurements of Cross-wired Devices	PML
9:20A	David Kealhofer	Williams College	Setting Up a Four-Wave Mixing Experiment in Cesium	PML
9:40A	Christina Knapp	Williams College	Optical Squeezing and Laser Locking	PML
10:00A	Marissa Galfond	University of Maryland College Park	Reducing the Area of Magnetic Tunnel Junctions Using a Focused Ion beam	PML
10:20A	Joshua Tyler	Towson University	LabVIEW Integration in a Mass Calibration Process	PML
10:40A	BREAK			
MODERATOR: Gretchen Campbell NIST Atomic Physics Division				
10:50A	Nathan Abrams	Whitman College	The Effects of Helium Upscattering on the Neutron Lifetime	PML
11:10A	J. Elliot Adelman	Hamilton College	Analysis of aCORN Data	PML
11:30A	Daniel Litwak	University of Maryland Baltimore County	An Improved Ultrasonic Measurement of Radiation Damage	PML
11:50A	Maggie Lovell	State University of New York Albany	Improvements in Ultrasonic Calorimetry for Dosimetry	PML
12:10P	Alexander Golden	University of Maryland College Park	Fast, Versatile Quenching in Single Photon Avalanche Diodes for Quantum Key	PML
12:30P	LUNCH			

SURF Student Colloquium: Wednesday - August 3, 2011
Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB
MODERATOR: Ricardo Mediavilla Santiago University of Puerto Rico				
2:00P	Musa Ibrahim	University of Maryland College Park	Develop an Analytical Reverse Blocking Model for Si and SiC Diodes and Incorporate the Model into the diode Model Parameter Extraction Software using LabWindows/CVI	PML
2:20P	Joseph Anthony Marcano Estévez	InterAmerican University of Puerto Rico	Develop an Additional Computer-Controlled Thermal Cycling Station in Order to Support Reliability Analysis for High-Power, High-Temperature, Power Semiconductor Devices and Modules	PML
2:40P	Colin Jacob	Rochester Institute of Technology	Understanding and Optimizing the Epitaxial Growth of Graphene on Silicon Carbide	PML
3:00P	Aida Colón-Berrios	University of Puerto Rico Mayaguez	Precisely Measuring Current on the Nano-Ampere to Femto-Ampere Range Using an Automated Current-to-Voltage Converter	PML
3:20P	Sean Weerakkody	University of Maryland College Park	Improving Velocity Measurement in NIST-3 Electronic Kilogram Apparatus	PML
3:40P	Alexander Siregar	Towson University	Constructing a Magnetic Field Probe for Use Regarding the NIST-4 Watt Balance	PML
4:00P	Douglas McNally	Miami University of Ohio	Motion Characterization and Endurance Metrology of Microrobots	PML
4:20P	END OF DAY			

SURF Student Colloquium: Thursday - August 4, 2011
 Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Isabel Beichl SURF Director, NIST Information Technology Laboratory				
9:00A	Andrea Haines	Hood College	Improving Electronic Health Record (EHR) Usability, Research, and the Communication Effort	ITL
9:20A	Michelle Cano	George Washington University	Software Improvement of Visualization Tools for Video Analytic Evaluations	ITL
9:40A	Jennifer Hill	Hood College	Creation of an Evaluation Interface for Human Assessments of Machine Translations	ITL
10:00A	Mark Villarrubia	University of Maryland College Park	Evaluating Searches Over Large Indices of Brief Documents	ITL
10:20A	Sarah Yifang Tang	Princeton University	An Evaluation of Local Shape Descriptors for 3D Shape Retrieval	ITL
10:40A	BREAK			
MODERATOR: Isabel Beichl SURF Director, NIST Information Technology Laboratory				
10:50A	Matteo Bellistri	University of Maryland College Park	String Searching on Container Files	ITL
11:10A	Mikala Michaelski	Virginia Polytechnic Institute and State University	Automation of the Microscope	ITL
11:30A	Stetson Zirkelbach	University of Colorado Boulder	The Effects of Scaling and Scanning Order on Image Signatures Based on Space-Filling Curves	ITL
11:50A	LUNCH			

SURF Student Colloquium: Thursday - August 4, 2011
 Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB
MODERATOR: Zeev Rosenzweig National Science Foundation				
2:00P	Matthew Fitzsimmons	Muhlenberg College	Characterizing the Morphology of the Bulk-Heterojunction of Organic Photovoltaics	MML/NCNR Chemistry
2:20P	Mary Allison Kelly	University of Maryland Baltimore County	Interdiffusion Studies of Organic Solar Cell Components	MML/NCNR Chemistry
2:40P	Reid Gunn	Fayetteville State University	Microscopic Analysis of Synthesized Mixed-Phase Atmospheric Particles	MML/NCNR Matls Science
3:00P	Nicholas Smith	Weber State University	Radiative Absorption and Freezing Characteristics of Black Carbon Immersed in Aqueous Aerosols	MML/NCNR Matls Science
3:20P	END OF DAY			

SURF Student Colloquium: Thursday - August 4, 2011
Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB
MODERATOR: Zeev Rosenzweig National Science Foundation				
9:00A	James McCarthy	University of Maryland College Park	Method Development for Characterizing TiO ₂ Nanoparticle Surfaces by Mass Spectrometry	MML/NCNR Chemistry
9:20A	Nicole Reardon	University of New Haven	Formation and Characterization of Monolayer Nanoparticle Clusters	MML/NCNR Chemistry
9:40A	Anne Rohlfing	Duke University	Shelf Life Study of Silver Nanoparticles	MML/NCNR Chemistry
10:00A	Christopher Marvel	Lehigh University	Characterization of Carbon Nanotubes in Composite Baseball Bats	MML/NCNR Chemistry
10:20A	Kun Li	University of Maryland College Park	Planar Arrays of Core/Shell Nanowires for Light Generation and Detection	MML/NCNR Chemistry
10:40A	BREAK			
MODERATOR: Robert Shull SURF Director, NIST Material Measurement Laboratory/NIST Center for Neutron Research (Materials Science)				
10:50A	Robert Boling	Harvard University	Determining Switching Mechanisms and Switching Field Distributions in Bit-Patterned Media	MML/NCNR Matls Science
11:10A	Eric Olson	University of Virginia	Characterization of Magnetic Nanoparticles for Biomedical Applications	MML/NCNR Matls Science
11:30A	Demetrios Pagonis	Davidson College	Dealloyed Pt _{100-x-y} Co _x Ni _y Catalysts for Oxygen Reduction Reaction	MML/NCNR Matls Science
11:50A	Matthew Widstrom	University of Maryland College Park	Stacked Electrode Back Contact Thin Film Heterojunction Solar Cells	MML/NCNR Matls Science
12:10P	Andrew Acquaviva	Le Moyne College	Gathering Benchmark Data for the Examples of FiPy	MML/NCNR Matls Science
12:30P	Elliott Ortmann	Tulane University	The Metrology of Shaping and Detecting X-Rays	MML/NCNR Matls science
12:50P	LUNCH			

SURF Student Colloquium: Thursday - August 4, 2011
Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Joonil Seog University of Maryland College Park				
2:00P	Julie Jackson	Western New England University	X-Ray Photoelectron Spectroscopy Used to Map Compositional Variations in Combinatorial Thin Film Libraries	MML/NCNR Matls Science
2:20P	Melanie Shelton	Jackson State University	Measuring the Efficacy of Ligand Displacement on Gold Nanoparticles – Applications in Nanomedicine	MML/NCNR Matls Science
2:40P	Sarah Russell	Montgomery College	Creating Stable Dispersions of Titanium Dioxide Nanoparticles in Environmental Matrices	MML/NCNR Matls Science
3:00P	Courtney Keeler	University of Texas Dallas	Effects of Dental Monomers and Initiators on Metabolic Activity and Biomass of Oral Biofilms	MML/NCNR Matls Science
3:20P	Neha Kumar	University of Maryland Baltimore County	Fabrication of Controlled Diameters of Nanofiber Scaffolds and Study of Stem Cell Response	MML/NCNR Matls Science
3:40P	Sai Sunkara	Pennsylvania State University	Tissue Engineering Reference Scaffolds to Enable Inter-Lab Comparison of Cell Culture Measurements	MML/NCNR Matls Science
4:00P	END OF DAY			

SURF Student Colloquium: Thursday - August 4, 2011
Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Eric Whitenon NIST Intelligent System Division				
9:00A	Reuben Abraham	University of Maryland College Park	Testing of Automated Impactor for In-Situ Monitoring of Machine Tool Dynamics	EL
9:20A	Rachel Liao	University of Maryland College Park	XMPP Services for Smart Transducers	EL
9:40A	Alexander Ortiz-Lozado	University of Puerto Rico Mayaguez	Temperature Control System for Pulse Heated Kolsky Bar	EL
10:00A	Mark Rubeo	Pennsylvania State University Erie	Quest for Precision: The Performance Evaluation and Compensation of a Meso-Scale Machining Center	EL
10:20A	Ian Younker	Lebanon Valley College	Analysis and Model of Multi-Sensor-Fusion Data	EL
10:40A	BREAK			
MODERATOR: Barbara Brawn-Cinani NIST-ARRA Fellowship Program, University of Maryland College Park				
10:50A	Taylor Brent	Harvey Mudd College	USARSim: A High-Fidelity Simulation of Robotics	EL
11:10A	Shelly Bagchi	George Washington University	Transformative applications: Using Android-Powered Smartphones to Enhance Soldier Operations	EL
11:30A	Mark Mifsud	University of Maryland College Park	Feature and Task-Based Evaluation of Robot-Generated Maps	EL
11:50A	Li Peng Liang	University of Maryland College Park	Safety of Humans Near Powered Industrial Vehicles	EL
12:10P	LUNCH			

SURF Student Colloquium: Thursday - August 4, 2011
 Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Randall McDermott NIST Fire Research Division				
2:00P	Michael Van Order	University of Maryland Baltimore County	Verification and Validation of the Fire Dynamics Simulator	EL
2:20P	Benjamin Trettel	University of Maryland College Park	Firelab Development: A Sandbox for Improving the Fire Dynamics Simulator	EL
2:40P	Carolyn Sandler	University of Maryland College Park	Human Response Processes for Emergency Communication	EL
3:00P	Andrew Nelson	Worcester Polytechnic Institute	Evaluation of the Consolidated Mode of Fire Growth and Smoke Transport (CFAST)	EL
3:20P	Timothy Lenhof	Eastern Kentucky University	Modeling Smoke in Room-Scale Fires	EL
3:40P	Jerrold Hegwood	Eastern Kentucky University	Verification and Modeling of Results from Nuclear Power Plant Control Room Fire Tests	EL
4:00P	Christopher Choi	Cornell University	Layer by Layer Self Assembly on Soft Foams: Reduced Foam Flammability Using Nanoparticle-Filled Coatings	EL
4:20P	BREAK			

SURF Student Colloquium: Thursday - August 4, 2011
Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Michael Gaitan NIST Semiconductor Electronics Division				
9:00A	Benjamin Jones	University of Maryland College Park	Structural and Electrical Characterization of Metal-Molecule-Silicon Junctions Produced by Flip Chip Lamination	PML
9:20A	Walter Zheng	State University of New York Bingham	Electrical Characterization of Flexible Solution-Processed Oxide Memristors	PML
9:40A	Alena Matusевич	Arizona State University	Organic Photovoltaic Devices: Band Gap Engineering	PML
10:00A	Hong Sio	Harvey Mudd College	Band Alignment Study Using Internal Photoemission: Applications to Metal-Gate / High-k Dielectric / Semiconductor Interfaces	PML
10:20A	Jun Ma	Cornell University	Electron Spin Resonance	PML
10:40A	BREAK			
MODERATOR: Ricardo Mediavilla Santiago University of Puerto Rico				
10:50A	Annas Afzal	City College of New York	Characterization of the Effect of Thermal cycling on the Signal Integrity of Interconnect Structures Used in 3D Integrated Circuits	PML
11:10A	Michael Carson	State University of New York Binghamton	Scanning Kelvin Force Microscope Based on a Tuning Fork	PML
11:30A	Derek Gooley	Miami University of Ohio	A Charge-Based Capacitance Measurement Implementation on Printed Circuit Board	PML
11:50A	Kaly Fon	City College of New York	Massively Parallel Long-Term Reliability	PML
12:10A	Serghei Drozdov	University of Maryland College Park	Extraction of Series Resistance from Advanced CMOS Devices	PML
12:30P	LUNCH			

SURF Student Colloquium: Thursday - August 4, 2011
Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB
MODERATOR: Kevin Douglass NIST Optical Technology Division				
2:00P	Eric Vess	James Madison University	Novel Methods for Remote Sensing Based on DIAL	PML
2:20P	Brenden Villars	Colorado School of Mines	Spatial Uniformity of a Three-Element Optical Trap Detector	PML
2:40P	Kyle Zora	College of William and Mary	Probing the Validity of Theoretical Models for Predicting Vibrational Spectra of Alanine and Its Polypeptides	PML
3:00P	Hailey Cunningham	George Washington University	Hemoglobin Saturation as Expressed by its Absorbance Curve	PML
3:20P	Alexis Denton	Miami University of Ohio	Imitating Ocean Reflectance Measurements with Diffuse Reflectance Standards	PML
3:40P	Anthony Lucio	Saginaw Valley State University	Shape Evolution of Polymer Structures with Thin Residual Layers Prepared by Nanoimprint Lithography	PML
4:00P	John Orthwein	Columbia University	Chirped-Pulsed Terahertz Spectroscopy for Broadband Trace Gas Sensing	PML
4:20P	END OF DAY			