SURF Student Colloquium: Thursday - July 26, 2012 Special Session: Green Auditorium, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
3:30P	Shelly Bagchi	George Washington University	Monitoring the Power Grid	PML

SURF Student Colloquium: Wednesday - August 1, 2012 Special Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
2:00P	Jeffrey Jacobs	University of Maryland College	Parallel LDPC Error Correction for Quantum Key	ITL
		Park	Distribution on a GPU	

SURF Student Colloquium: Thursday - August 2, 2012 Special Session: Room H107, Building 217

	TIME	SPEAKER	UNIVERSITY	TITLE	LAB
	3:00P	Brian Weinstein	American University	Temperature Monitoring and Control in Laser	PML
Ĺ				Cooling Laboratories	

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SURF Student Colloquium: Tuesday - August 7 Plenary Session: Green Auditorium, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB			
9:00A	Willie May,	National Institute of Standards &	Welcome	NIST			
	Associate Director for	Technology					
	Laboratory Programs						
	MODERATOR:						
		Tony L. Bryant, Virgini	a State University				
		Robert Shepard, Science and	l Engineering Alliance				
9:15A	Sean Collins	University of Michigan	Chemical Heterogeneity of Wildfire Aerosol	MML/NCNR			
			Emissions: Implications for Climate Change	ChemBio			
9:45A	Andrea Haines	Hood College	Determining Important Control Parameters of a	ITL			
			Genetic Algorithm				
10:15A	Victoria Savikhin	Purdue University	Assembly and Measurement of Quadruplex	CNST			
			DNA Nanomaterials				
10:30A			BREAK				
11:00A	Adam Morgan	State University of New York	Through Silicon Via (TSV) Reliability	PML			
		Binghamton	Monitoring System				
11:30A	Anna D'Alessio	University of Delaware	Are You Being Greenwashed	EL			
12:00P	Amanda Huon	University of the Sciences	Characterization of Carbon Nanomaterials	MML/NCNR			
		Philadelphia		MatSci			
12:30P		LUNCH - SURF Directors and	External Visitors (Dining Rooms A & B)				

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SURF Student Colloquium: Tuesday - August 7, 2011 Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB		
	MODERATOR: Tabbetha Dobbins Rowan University					
2:00P	Madeline Cramer	Carnegie Mellon University	Molecular Dynamics Simulations of Aluminum Nanoparticles	MML/NCNR MatSci		
2:20P	Jake Steiner	University of Maryland College Park	Phase Equilibria in Co-Al-W Ternary System	MML/NCNR MatSci		
2:40P	Newell Moser	University of New Hampshire	Designing and Constructing Steel Cruciform Specimens for a Biaxial Tensile Machine	MML/NCNR MatSci		
3:00P	Komal Syed	University of Maryland College Park	Estimation of the Uncertainty in Orientation Distribution Function Using Monte Carlo Technique	MML/NCNR MatSci		
3:20P	Desirée Garcia Torres	University of Puerto Rico	Electrocatalytic Hydrogen Oxidation and Evolution at Pt Surfaces in Alkaline Solution	MML/NCNR MatSci		
3:40P	Nathan Smith	University of Maryland Baltimore County	Optimization and Modeling of Metal-Oxide- Semiconductor (MOS) Photoelectrochemical Cells	MML/NCNR MatSci		
4:00P	Matthew Widstrom	University of Maryland College Park	3D Geometry Photovoltaic Devices	MML/NCNR MatSci		
4:20P	Lucas Carneiro	St. Mary's College of Maryland	Effects of Film Processing Parameters on Organic Photovoltaic Device Performance	MML/NCNR MatSci		
4:40P	Jacqueline Johnson	University of Delaware	The Effect of Ambient Conditions on Solution-Cast Organic Photovoltaics	MML/NCNR MatSci		
5:00P		EN	D OF DAY			

2012 SURF Colloquium Schedule Page 3 of 24

SURF Student Colloquium: Tuesday - August 7, 2012 Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
		MODERATO Todd Hoopes, IBBR/Unive		
2:00P	Ctanhania Millan			MML/ChemBio
2:00P	Stephanie Miller	University of Maryland	Expression, Crystallization, and Holographic	WIVIL/CHEIIIDIO
2.200	N. C C. 1	College Park	Analysis of the Protein Rubredoxin	MM (Cl D:
2:20P	Mofiyinfoluwa	University of Maryland	Measuring Electrochemically-Induced	MML/ChemBio
	Obadina	Baltimore County	Oxidative Damage in DNA	
2:40P	Rachel Meyer	Hood College	Synthesis of Thiolated Tether Compound to	MML/ChemBio
			Improve the Properties of tBLM Used in the	
			Studyof Integral Membrane Proteins	
3:00P	Taylor Brown	Gonzaga University Washington	An Investigation into the Enhancement of	MML/ChemBio
		State	Vesicle-Based Blycan Arrays	
3:20P	Tamika Ragland	Alabama A&M University	Measurements of Vitamin A in Northern Fur	MML/ChemBio
			Seals	
3:40P	Nicholas Smith	Weber State University	Glycoanalysis Using Universal Proteolysis	MML/ChemBio
			and Mass Spectrometry: Showing Off the	
			Sweet Side of Proteins	
4:00P	Jiemin Wu	University of Maryland	Developing Analytical tools for the	MML/ChemBio
		College Park	Characterization of Protein Biomarkers Using	
			Antibodies and Superparamagnetic Substrates	
4:20P	Matthew Boyce	Virginia Wesleyan College	Investigation of Sample Matrix Effects Using	MML/ChemBio
			Spinning Sampling Chamber Laser Ablation	
			ICPMS	
4:40P	Pahoua Xiong	California State University Fresno	Post-Column Counter-Gradients for Better	MML/ChemBio
			LC/MS Analysis	
5:00P		ENL	O OF DAY	

2012 SURF Colloquium Schedule Page 4 of 24

SURF Student Colloquium: Tuesday - August 7, 2012 Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
		MODERAT	OR:	
2:00P	Catherine Baker	DePauw University	Calculating Graph Toughness	ITL
2:20P	Jason Wu	University of California Berkeley	Optimal Broadcast and Spread of Information in a Network with Limited Resources	ITL
2:40P	John Orthwein	Columbia University	Techniques in Signal Processing for Chirped- Pulse Broadband Trace Gas Sensor	ITL
3:00P	Connor MacKenzie	Westminster College	Simplifications and Generalizations of Generating Functions for Classical Orthogonal Polynomials with Definite Integrals	ITL
3:20P	Divya Mouli	Carnegie Mellon University	Hands Off!!:Using Gesture Recognition to Manipulate 3D Visualizations	ITL
3:40P	Zachary Keller	DePauw University	Modeling the Spread of Infection	ITL
4:00P	Brian Clanton	Rochester Institute of Technology	Exploring Real-Time Web-Based 3D Mathematical Function Rendering and Manipulation	ITL
4:20P	Luis Perez Cruz	University of Puerto Rico	Monitoring and Analyzing the Deployment of Resource Public Key Infrastructure (RPKI) within the Internet	ITL
4:40P				
5:00P		ENI	O OF DAY	

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SURF Student Colloquium: Tuesday - August 7, 2012 Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
		MODERAT	OR:	
		John Woodward ,Surface Scienc	ee Division, PML/NIST	
2:00P	Julian Irwin	Goucher College	Tunnel Junction Measurements of Spin Currents	PML
2:20P	Chase Brignac	Louisiana State University	Quantum Metrology with Nonclassical Light	PML
2:40P	Dylan Heberle	Rochester Institute of Technology	Tunability of Photon Entanglement	PML
3:00P	Zachary Pruett	Appalachian State University	The Brightness of the Moon: Lunar Spectra Irradiance	PML
3:20P	Joseph Whalen	Colorado School of Mines	Lunar Spectral Irradiance: Calibration of the Moon	PML
3:40P	Jonathan Beaumariage	Rochester Institute of Technology	Finding Numerical Solutions of the Fourier Modal Method to Measure Two Dimensional Gratings	PML
4:00P	Tom Mullins	Carnegie Mellon University	Optimizing Photonic Crystals Using Computer Simulation	PML
4:20P	John Ortmann, Jr.	Tulane University	Frequency Stabilization of a Continuous Wave Dye Laser for Use as a Quantum Memory	PML
4:40P				
5:00P		ENL	O OF DAY	

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SURF Student Colloquium: Tuesday - August 7, 2012 Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB			
		MODERAT	OR:				
	Albert T. Jones, Systems Integration Division, EL/NIST						
2:00P	Adrian Hamins-	University of Maryland	Measuring Inadequate Interoperability in the	EL			
	Puertolas	College Park	Manufacturing Industry				
2:20P	Brian Presser	State University of New York	Benefits and Costs of Energy Efficiency in	EL			
		Binghamton	New Buildings				
2:40P	Samantha Engel	Gonzaga University Washington	Rheological Properties of Sustainable Ternary	EL			
		State	Binders				
3:00P	Arvind Harinder	University of Virginia	Modeling Material Information Flow Through	EL			
			the Product Lifecycle				
3:20P	Lina Valivullah	University of Maryland	Manufacturing Specific Process Information	EL			
		College Park	Models for Sustainability				
3:40P	Megan Watkins	State University of New York	Sustainability Analysis of a Die Casting	EL			
		Binghamton	Process				
4:00P	Ryan Consylman	Millersville University of	A Case Study for Sustainability Modeling and	EL			
		Pennsylvania	Optimization				
4:20P	Ryan Dorson	University of Maryland	Reasoning with PrIKL	EL			
		College Park					
4:40P	Sean Reidy	University of Pennsylvania	A Picturesque View of Sustainable	EL			
			Manufacturing Standards				
5:00P		ENI	D OF DAY				

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
		MODERATO	OR:	
		Dan Neumann, NC		
9:00A	Alex Yee	University of Maryland College Park	Dataflow: Web-Based Data Reduction	MML/NCNR MatSci
9:20A	Wayne Treible	Millersville University of Pennsylvania	Implementing and Optimizing Calculations of In-Plane Scattering Off of Thin Films	MML/NCNR MatSci
9:40A	Pavan Bhargava	University of Maryland College Park	Correcting Substrate Warp for X-Ray Reflectometry	MML/NCNR MatSci
10:00A	Lisa Krayer	University of California San Diego	Structural Studies of Multiferroic Thin Films	MML/NCNR MatSci
10:20A	Vikas Bhatia	University of Maryland College Park	Neutron Diffraction Studies of reduced Perovskite Iron Oxides	MML/NCNR MatSci
10:40A		В	REAK	
		MODERATO		
10 -0 :		Dan Neumann, NC		1.0000000
10:50A	Donald Richardson	University of Maryland Baltimore County	Assignment of Wyckoff Positions for Entries in the NIST Metals Database	MML/NCNR MatSci
11:10A	Max Carlson	Georgia Institute of Technology	Data Visualization for Analysis of the NCNR Cold Source Operation	MML/NCNR MatSci
11:30A	Matthew Cline	Bridgewater College	Structural Studies of Important Industrial Gases Adsorbed in Zeolites	MML/NCNR MatSci
11:50A	Michelle Reele	State University of New York Buffalo	Characterizing the Structural and Rheological Properties of Triblock Copolymer Solutions	MML/NCNR MatSci
12:10P	Elizabeth Ghias	American University	Synthesis of PEG Compounds for CB2 Structure Characterization with Neutron Scattering and Reflectivity Techniques	MML/NCNR MatSci
12:30P	Addison Goodley	University of Maryland College Park	Cloning, Expression, and Purification of TRPML-1	MML/NCNR MatSci
12:50P		$oldsymbol{L}$	UNCH	

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
		MODERA	ΓOR:	
		Tabbetha Dobbins, Ro	owan University	
		Robert Shepard, Science and	l Engineering Alliance	
2:00P	Benjamin Jones	University of Maryland	Effects of Interfacial Roughness in Small	MML/NCNR
		College Park	Angle Neutron Scattering from Multiphase	MatSci
			Polymers	
2:20P	Nicholas Arnold-	University of Maryland	DNA Self-Assembly on 1-D and 2-D Carbon	MML/NCNR
	Medabalimi	College Park	Lattices	MatSci
2:40P	Pascal Garczynski	State University of New York	Fluidity at Oil-Water Interfaces	MML/NCNR
		Albany		MatSci
3:00P	Anh-Tuan Lee	Prairie View A & M University	Novel Capillary Viscometry Protein	MML/NCNR
			Therapeutic Formulation	MatSci
3:20P	Justin Lewis	Alabama A & M University	Molecular Modeling Tools for Advanced	MML/NCNR
			Materials	MatSci
3:40P	Elizabeth Ashley	University of Maryland	Dimensional Characterization of Si	MML/NCNR
		College Park	Nanogratings Formed by PS/PMMA Directed	MatSci
			Self Assembly	
4:00P	Estefania Quiñones	University of Puerto Rico	Hydration Dynamics of Thin Nafion Films	MML/NCNR
	Meléndez		Studied with Polarization Modulation Infrared	MatSci
			Reflection Absorption spectroscopy (PM-	
			IRRAS)	
4:20P	Allison Young	University of New Haven	Nanofiltration Membranes and Their Swelling	MML/NCNR
			Properties by Use of XR and QCM	MatSci
4:40P	John White	Southern University	Fabrication, Optimization, and Analysis of	MML/NCNR
			PLGA Nanoparticle for Potential Advancing	MatSci
			in Stem Cell Therapy	
5:00P		EN	TD OF DAY	

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB
		MODERA	ATOR:	
2:00P	Ashley Newton	Columbia University	Transfer Efficiency of Explosive and Narcotic	MML/ChemBio
			Residue from Bytac®	
2:20P	Deborah Leman	North Georgia College and State	Determination of Polymer/Fullerene Bilayer	MML/ChemBio
		University	Miscibility	
2:40P	Graham Spicer	Carnegie Mellon University	Fabrication of Nanopores in Anodized Aluminum	MML/ChemBio
			Oxide	
3:00P	Danielle Artmayer	Oklahoma State University	Empirical Calibration Curves for Concrete	MML/ChemBio
3:20P	Joshua Cohen	Brown University	A Discussion of the Efficacy of the Coulter	MML/ChemBio
			Principle for Counting Micron-Scale Particles and	
			Protein Aggregates in Comparison to Other	
			Current Methods	
3:40P	Nathaniel Ly	Augsburg College	Uncertainty in Live Cell Fluorescence Intensity	MML/ChemBio
			Measurements Estimated With a Mean Squared	
			Displacement Analysis	
4:00P	Stuart Ness	Arizona State University	Enhancing the NIST Chemistry Web Book	MML/ChemBio
4:20P	Katie Hafner	Montgomery College	Enhancing the Chemistry Web Book with	MML/ChemBio
			Optimized 3D Structures – Part 2	
4:40P	Shir Boger	University of Maryland	Building Consistent Nanomaterial Ontologies in a	MML/ChemBio
		College Park	Federated Environment	
5:00P		E	ND OF DAY	

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB		
MODERATOR:						
		Don Snyder, The College of	^r William and Mary			
9:00A	Kristin Giauque	Stevenson University	A Vision of the Future	ITL		
9:20A	Julian Lee	Georgetown University	Faithful to the Original? The Impact of Latent	ITL		
			Fingerprint Enhancement			
9:40A	Jacob Siegel	University of Maryland	The Kinect: A Cheap and Accurate Depth	ITL		
		College Park	Measurement Tool			
10:00A	Stetson Zirkelbach	University of Colorado Boulder	Exploration of Big Data Technologies to Scale	ITL		
			Up Cancer Prognosis System			
10:20A	Adam Moore	University of South Alabama	Enabling the Extraction of Publications	ITL		
			Metadata			
10:40A		B	BREAK			

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB		
	MODERATOR:					
10:50A	Angel Rosado	University of Puerto Rico	Testing and Traceability of Entropy Sources	ITL		
			for Random Bit Generation			
11:10A	Charles Scott	Hampton University	Diagraph Method in Detecting Rule Faults for	ITL		
			Attribute Based Access Control Policies			
11:30A	Michael Smith	Towson University	Windows Phone Malware Detection	ITL		
11:50A	Alexander Roca	St. Mary's College of Maryland	Detecting Malware on Smart Phones	ITL		
12:10P	Matthew Blum	College of William and Mary	It's a Secret to Nobody: Using a Public source	ITL		
			of Randomness for Cryptography and Zero-			
			Knowledge Protocols			
12:30	Edward Kimmel	Millersville University of	Crypto-Graphics: Visual Applications of the	ITL		
		Pennsylvania	NIST Randomness Beacon			
12:50P		$oldsymbol{L}$	ÜNCH			

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB		
		MODERAT	OR:			
2:00P	Sarice Barkley	St. Olaf College	Testing Shapes and Sizes of the Diamagnetic Lateral Force Calibrator	CNST		
2:20P	Brian Janiszewski	State University of New York Albany	Chemical Surface Patterning	CNST		
2:40P	Sterling Brooks	Savannah State University	Catalyst Structure Investigated by In-Situ HRTEM Measuring During CNT Growth	CNST		
3:00P	Anthony Gianfrancesco	Worcester Polytechnic Institute	Thin Film Deposition of Quantum Dots (Nanoscale Characterization of Photovoltaic Devices)	CNST		
3:20P	Jason Guss	State University of New York Binghamton	Spin Current Polarization in Amorphous CoFeB Measured via the Spin-Wave Doppler- Effect	CNST		
3:40P	Anton Lintel	University of Nebraska Lincoln	Domain Size Dependence of Successive Alternating Layers of Co and Pd	CNST		
4:00P	Stephen Epstein	Virginia Polytechnic Institute and State University	Cavity Optomechanical Sensors for Atomic Force Microscopy	CNST		
4:20P	Bryce Thurston	Colorado School of Mines	Electronic Transport Properties of the Metal Organic framework Cu ₃ (BTC ₂)*TCNQ	CNST		
4:40P						
5:00P	END OF DAY					

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SURF Student Colloquium: Wednesday, August 8, 2012 Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
		MODERATO	OR:	
		iel Hussey, Radiation and Biomolecu		
9:00A	Joshua Kahn	Rochester Institute of Technology	Neutron Imaging of Chemical Phase	PML
			Transitions in Alkaline Batteries	
9:20A	Elizabeth Scott	Tulane University	Modeling Helium 3 Scintillation with	PML
			MCNPX	
9:40A	Nathan Abrams	Whitman College	The Effects of Helium Upscattering and	PML
			Neutron Absorption on the Neutron Lifetime	
10:00A	Yasamin Abbaszadeh	University of Maryland	Characterization of the Dose-Rate Effect for	PML
		College Park	Alanine Ionizing-Radiation Dosimetry	
10:20A	Matthew Tweardy	American University	Creating Thermometers of the Future: Imaging	PML
			Temperature Gradients Using Ultrasonic	
			Transducers	
10:40A		В	BREAK	
		MODERATO		
		Douglass, Radiation and Biomolecu		
10:50A	Alexis Denton	Miami University of Ohio	Validation Measurements for Optical Remote	PML
			Sensing of Greenhouse Gases	
11:10A	Jenna Legatt	Gustavus Adolphus College	Shine On Me	PML
11:30A	Julian Hassinger	State University of New York	Nanoscale Imaging Using Spectral Domain	PML
		Stony Brook	Optical Coherence Tomography	
11:50A	Pasquale Raico III	St. Mary's College of Maryland	Using Arbitrary Waveform Controlled Lasers	PML
			and Cavity Ring-Down Spectroscopy to	
			Determine Greenhouse Gas Concentrations	
12:10P	John Villanova	Appalachian State University	Analysis of Toolmark Topographies from Ten	PML
			Consecutively Manufactured Chisels	
12:30P	Lisa Bendall	Brigham Young University	Shape Evaluation of Nanoparticles Using the	PML
			TSOM Method	
12:50P		L	UNCH	

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB			
	MODERATOR: Richard Steiner, Quantum Measurement Division, PML/NIST						
2:00P	Leigh Lydecker IV	State University of New York Albany	Characterization of SAMs on Cobalt and Gold	PML			
2:20P	Alyssa Brigeman	Wake Forest University	Exploring Organic Magnetoresistance in Spintronic Devices	PML			
2:40P	Shahin Amini	Prairie View A & M University	Effect of Interlayer in Organic Tandem Solar Cell	PML			
3:00P	Michael Briggs	State University of New York Albany	Space Charge Limited Current Spectroscopy in Organic Single Crystal Semiconductors	PML			
3:20P	Thomas Zirkle	Andrews University	Magnetic Field and Position Probe	PML			
3:40P	Maxwell Zhou	Texas A & M University	Controlled Production of Highly Charged Ions in Rydberg States	PML			
4:00P	Caroline Litchfield	George Washington University	Calibrating Calibrators	PML			
4:20P	Arad Lajevardi-Kosh	Arizona State University	Characterization and Preparation of Actin Surfaces and Tethered Bilayer Members	PML			
4:40P	Ryan Lake	State University of New York Binghamton	Investigation of DNA Transport in Nanofluidic Slits	PML			
5:00P		EN	ID OF DAY	1			

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB			
	MODERATOR:						
	Tony L. Bryant, Virginia State University						
9:00A	Andrew Gorbaty	Loyola University Maryland	Web Based Applications for Machine Tools	EL			
9:20A	Keith Hebenstreit	State University of New York Binghamton	Measurement Systems for Additive Manufacturing Processes	EL			
9:40A	Luke Savage	University of North Carolina Charlotte	Diamond Turning Machine Characterization	EL			
10:00A	Mairim Nieves- Nevárez	University of Puerto Rico	Wireless Sensor Networks for Machine Monitoring	EL			
10:20A	Minh Trang Nguyen	Whitworth University	Testing the Performance of 6LoWPAN-Based Wireless Sensor Network	EL			
10:40A		i	BREAK				

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB			
	MODERATOR: Aaron Forster, Materials and Structural Systems Division, EL/NIST						
10:50A	Daniel Stehlik	Arizona State University	Beginning Standardization of Condition Monitoring Tests for Cables in Nuclear Power Plants	EL			
11:10A	James Ging	State University of New York Stony Brook	Fate of Carbon Nanotubes in Polymer Nanocomposites Exposed to UV Radiation	EL			
11:30A	Jennifer Gil Acevedo	University of Puerto Rico	Durability Study of Polymer Nanocomposites	EL			
11:50A	Jonathan Schear	Brown University	Modeling the Temperature of Panels Exposed to the Outdoors	EL			
12:10P	Kathryn Connolly	University of Maryland College Park	Durability of Backsheet Polymers Used in Photovoltaic Applications	EL			
12:30P	Patrick Gaume	University of Maryland College Park	Effects of Key Environmental Factors on Degradation of Polymeric Films Used in Protective Glazing Systems	EL			
12:50P		L	UNCH				

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SURF Student Colloquium: Wednesday - August 8, 2012 Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB		
	MODERATOR: Rick Davis, Fire Research Division, EL/NIST Harrison Skye, Energy and Environment Division, EL/NIST					
2:00P	Andrew Nelson	Worcester Polytechnic Institute	Modeling Upholstered Furniture in Fire Environments with CFAST	EL		
2:20P	Barbara Hall	Worcester Polytechnic Institute	CFAST and the Incorporation of Uncertainty	EL		
2:40P	Katelyn Keberle	Arizona State University	Environmentally-Friendly Flame Retardant Coating for Polyurethane Foam	EL		
3:00P	Nicholas Faenza	University of Maryland College Park	Reduced Flammability of Polyurethane Foam Using a Layer-by-Layer Assembly with Natural Materials	EL		
3:20P	Ray Mbonu	Texas Southern University	Fire Proof Foams	EL		
3:40P	Shannon Hines	Alabama A & M University	Fire Resistant Foam	EL		
4:00P	Sophie Lang	New College of Florida	Bench Scale Measurements of Toxic Effluents in Fire Smoke	EL		
4:20P	David Richardson	Brigham Young University	Multi-Split HVAC Unit Testing and Analysis	EL		
4:40P	Norman Rivera-Cotty	University of Puerto Rico	Instrumentation of Geothermal Heat Pump Test System	EL		
5:00P		ENI	O OF DAY			

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SURF Student Colloquium: Thursday - August 9, 2012 Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB		
	MODERATOR: Joonil Seog, University of Maryland College Park					
9:00A	Lance Dockery	Mt. Saint Mary's University	Analysis of CO ₂ Loss in Gas Cylinders and Changing Concentrations Over Time in NIST Gas SRMs	MML/ChemBio		
9:20A	Matthew Jones	North Georgia College & State University	Measurement of Material Thermal and Chemical Characteristics with the Laser- Driven Thermal Reactor	MML/ChemBio		
9:40A	Peter Luu	University of Maryland Baltimore County	Construction and Testing of the Next Generation Ozone Standard Reference Photometer	MML/ChemBio		
10:00A	Karthikeya Menta	University of Maryland College Park	Quantification of Human Bone Marrow Stromal Cell Shape Dynamics in collagen Three-Dimensional Scaffolds	MML/NCNR MatSci		
10:20A	Jillian Matson	University of South Carolina	Investigating ECM Biomolecule Interactions	MML/NCNR MatSci		
10:40A	Brismar Pinto-Pacheco	University of Puerto Rico	The Advantage of Using TiO ₂ in Improving the Performance of Dental Resins	MML/NCNR MatSci		
10:50A		В	REAK			

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SURF Student Colloquium: Thursday - August 9, 2012 Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB			
	MODERATOR: Joonil Seog, University of Maryland College Park						
11:10A	Richard North III	Texas Southern University	Characterizing the Safety and Efficacy of Fluoride Dental Varnish with Applications for Standards Development and Clinical Relevance	MML/NCNR MatSci			
11:30A	Danielle Gorka	University of New Haven	Aging Effects on the Enzymatic Activity of Functionalized Gold Nanoparticles	MML/NCNR MatSci			
11:50A	Darren Driscoll	Virginia Wesleyan College	Developing a Library of Selenium Nanoparticles Based on Charge, Size and Stability	MML/NCNR MatSci			
12:10P	Luis Correa	University of Maryland College Park	High Resolution Displacement Metrology for Nanomechanical Properties	MML/NCNR MatSci			
12:30P	Bernadette Cannon	Worcester Polytechnic Institute	Studying Phase Transformations in Al/Ni Reactive Multilayers Using Nanocalorimetry	MML/NCNR MatSci			
12:50P	Maryam Sabeghi	University of Oklahoma	Solidification of Nanoparticles at High Rate	MML/NCNR MatSci			
1:10P	Il Kyoon Kim	University of Maryland College Park	Phase Transition Measurement of Lipids by Nanocalorimetry	MML/NCNR MatSci			
1:30P		PIZZ	A PARTY!!!				

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SURF Student Colloquium: Thursday, August 9, 2012 Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
		MODERA	ATOR:	
10:50A	Jeffrey Turner	University of Maryland	Video Interpolation with the FFMPEG VidAT	ITL
		Baltimore County	Tool	
11:10A	Luis Rivera Santiago	University of Puerto Rico	Text Lines Segmentation Performance	ITL
			Assessment Tool	
11:30A	Courtney Smith	Hampton University	Video Stream Face Detection	ITL
11:50A	Marissa Sileo	University of Maryland	Biomedical Image Analysis	ITL
		College Park		
12:10P	Lael Rayfield	University of Maryland	Simple Analysis of Biometric Matchers	ITL
		Baltimore County		
12:30P	Mark Villarrubia	University of Maryland	Analyzing Microblog Search Through an	ITL
		College Park	Ablation Study of TF-IDF	
12:50P				ITL
1:10P				
1:30P		PIZ	ZZA PARTY!!!	

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SURF Student Colloquium: Thursday, August 9, 2012 Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB			
	MODERATOR:						
		1		1			
9:00A	Timothy Kohler	State University of New York Binghamton	Charge-Based Capacitance Measurements and SCM on a Chip	PML			
9:20A	Meagan Kelso	University of Texas Dallas	Quick Read Codes Made by Nanoindentation	PML			
9:40A	Lei Cao	State University of New York Binghamton	Massively Parallel TDDB Test System	PML			
10:00A	Serghei Drozdov	University of Maryland College Park	Characterizing the Impact of a Single Interface Layer Defect in CMOS Devices	PML			
10:20A	Joseph Marcano Estévez	University of Puerto Rico	Nano-Injector Based Direct Write Metal Deposition	PML			
10:40A							
10:50A							
11:10A							
11:30A							
11:50A							
12:10P							
12:30P							
12:50P							
1:10P							
1:30P		PIZ	ZA PARTY!!!				

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SURF Student Colloquium: Thursday - August 9. 2012 Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB			
MODERATOR:							
Tony L. Bryant, Virginia State University							
9:00A	Major McNair	Virginia State University	Android Defense Science	EL			
9:20A	Matthew Newcomer	University of Maryland	Performance Assessments of Tactical	EL			
		Baltimore County	Handheld Android Applications				
9:40A	Allison Rose	Loyola University Maryland	Calibrating Laser Range Scanners for Robot	EL			
			Safety				
10:00A	Erica Sanker	University of Maryland	An Analytical Finite Element Model of	EL			
		College Park	Micro- and Nanoscale Electrostatic Beam				
			Resonators				
10:20A	Evan Kesten	State University of New York	A Low-Cost 3D Safety System for Robot	EL			
		Binghamton	Applications				
10:40A	Lipeng Liang	University of Maryland	Dynamic Update of MySQL Database in	EL			
		College Park	Kitting				
11:00A	BREAK						

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SURF Student Colloquium: Thursday - August 9. 2012 Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB		
MODERATOR:						
Erica Kuligowski, Fire Research Division						
11:10A	Scott Hemley	University of Maryland	Computational Fluid Dynamics Simulations	EL		
		College Park	for Building Aerodynamics			
11:30A	André Rosete	University of Texas Dallas	Ghosts in the House	EL		
11:50A	Kelly Webster	Virginia Polytechnic Institute and	How to Feed and Water Your Dishwasher	EL		
		State University				
12:10P	Abbas Jaber	Arizona State University	Parsing COLLADA: A Robust Method for	EL		
			Inputting Geometry into FDS			
12:30P	Emily Wiess	University of Maryland	Building Evacuation of People with Mobility	EL		
		College Park	Impairments			
12:50	Kevin Li	University of Maryland	Comparison of FDS Predictions with Gas	EL		
		College Park	Velocity Measurements in the Exhaust Duct			
			of a Stationary Source			
1:10P	Max Gould	Reed College	Verification of Computational Fluid	EL		
			Dynamics Program for Fire Modeling			
1:30P	PIZZA PARTY!!!					

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