SURF Colloquium N1ST Plenary Session - August 3, 2026 **Gaithersburg Green Auditorium & Boulder Bldg 1, Room 1107**		**Zoom link:** https://nist.zoomgov.com/j/1611193419?pwd=jLFrLapFjtxcN45raSdm3NlTnmwJxJ.1 **Meeting ID:** 1611193419 **Passcode:** 325093	
11:00 AM MT	**1:00 PM ET**	**Welcome Remarks & Gaithersburg Moderator:** *Cara O'Malley*	**Boulder Moderator:** *Susan Schima* **Zoom Moderator:**
TIME (MT)	**TIME (ET)**	***Plenary Speaker*** **- OU (campus)**	**Presentation Title**
11:05 AM	**1:05 PM**	***Gabriel Rosen-Turits*** **- CTL (Boulder)**	Radiation in Coplanar Waveguides at High Frequencies
11:30 AM	**1:30 PM**	***Juliana Escuti*** **- ITL (Gaithersburg)**	Continuous Validation of BF Specifications of Input/Output Check Related CWEs
11:55 AM	**1:55 PM**	***Dinah-Luba Beylison*** **- EL (Gaithersburg)**	Using Machine Learning to Enable Continuous Uncertainty Quantification of a Digital Twin for an Industrial Robot
12:20 PM	**2:20 PM**	***Vivia Nguyen*** **- MML (Gaithersburg)**	How Many is Too Many: Drug Sensitivity Drifting in Long Passaging HG009 Clonal Cell Lines
12:45 PM	**2:45 PM**	BREAK	N/A
1:00 PM	**3:00 PM**	***Miles Antaya*** **- PML (Gaithersburg)**	Bond Strength Measurements of Semiconductor Wafers
1:25 PM	**3:25 PM**	***Reece Tippery*** **- NCNR (Gaithersburg)**	Evaluation of Droplet Breakup and Mixing in a Millifluidic Droplet Generator
1:50 PM	**3:50 PM**	***Adriano Cristaldi*** **- PML (Boulder)**	Optimizing Novel Imaging Protocols to Study Microwave Propagation in the Human Body
2:15 PM	**4:15 PM**	END OF PLENARY SESSION	N/A

		Parallel Session #1	Parallel Session #2	Parallel Session #3
Parallel Sessions Tuesday, Aug 4, 2026	**Location**	**Gaithersburg, Bldg 101, Heritage Room**	**Gaithersburg, Bldg 101, Portrait Room**	**Gaithersburg, Bldg 101, Lecture Room D**
	Zoom Link	https://nist.zoomgov.com/j/1619541627?pwd=tPz5aBzJx2M7i9vrphwLjHJK5gVaXS.1 **Meeting ID:** 1619541627 **Passcode:** 212437	https://nist.zoomgov.com/j/1615780237?pwd=92arHgOojqT02Yst9izLbOPtdAPOMT.1 **Meeting ID:** 1615780237 **Passcode:** 121275	https://nist.zoomgov.com/j/1616477556?pwd=Z2M6Ywv9dRh2xaYzBldZk8Tf8eqAuk.1 **Meeting ID:** 1616477556 **Passcode:** 222229
Time (ET)	**Host Info**	**Host Laboratory: PML** **Moderator:** *Josh Pomeroy* **Zoom Moderator:** *Christina Hacker*	**Host Laboratory: EL** **Moderator:** *Patrick Dixon* **Zoom Moderator:** *Cartier Murrill*	**Host Laboratory: MML** **Moderator:** *Dilara Meli* **Zoom Moderator:** *Dan Siderius*
	9:00 AM	***Myriam Bajani*** - Cryogenic LC Resonators for RF Reflectometry and Sub-pF Capacitance Measurements	***Ambika Anand*** - Characterization of Underfills for Reliable Semiconductors	***Bridgette Bidwell*** - A Density Functional Theory and Machine Learning Workflow for Point Defects in Semiconductors
	9:15 AM	***Tenaya Chen Lin*** - Developing an Interferometric Method for Dose Distribution Measurement in FLASH Radiotherapy Using Inverse Abel Reconstruction	***Natalia Quesada Marshall*** - Spectral Fingerprinting of Phyrrhotite Reactions in Concrete	***Aditi Gali*** - Additive-Assisted Electrochemical Deposition for Efficient Indium Recovery from Electronic Waste
	9:30 AM	***Blayne Fuller*** - Automated and Scalable Fast Id-Vg Measurements for SiC Transistor Reliability Characterization	***Evelyn Cabrera Hernandez*** - Mitigating Pyrrhotite-Induced Concrete Damage Through the Application of Sealants and Coatings	***Ryan Giang*** - Selective Recovery of Indium from E-Waste via Organic Mixed Conductors
	9:45 AM	***Eugene Im*** - Position Correlation of Biphotons Using Gated Single Photon Imaging Method	***Illai Faiman*** - Mapping Pyrrhotite-Driven Internal Aulfate Attack in Concrete Foundations with XRF	***Logan Magaha*** - CD-SAXS Code Advancements and Round Robin for Development of a New Calibration Standard
	10:00 AM	***Lavanya Mahajan*** - Defect Characterization of SiC MOSFETs Using Electrical Measurements and EDMR	***Alexander Ibacache*** - Expansion and Degradation of Two-Dimensional Configurations of Fused Quartz and Cement	***Janet Park*** - Optimizing High-Resolution DLP-SLA 3D Printing for Microfluidic Prototyping
	10:15 AM	**BREAK**	**BREAK**	**BREAK**
Time (ET)	**Host Info**	**Host Laboratory: PML** **Moderator:** *Daniel Jardin* **Zoom Moderator:** *Christina Hacker*	**Host Laboratory: EL** **Moderator:** *Cartier Murrill* **Zoom Moderator:** *Katherine Hoffman*	**Host Laboratory: MML** **Moderator:** *Yvonne Gerbig* **Zoom Moderator:** *Trina Mouchahoir*
	10:30 AM	***Juandiego Astudillo*** - Progress Developing Frequency-Multiplexed Data Acquisition for Charged Particle Thermal Kinetic Inductance Detector	***Evan Taller*** - Investigating Corrosion Properties of Steel Reinforcements in Concrete Made With Alternative Cement Formulations	***Christopher Gutowski*** - Characterizing HfO2 and TiN-Gold thin-films using Ellipsometry and X-ray Reflectivity
	10:45 AM	***Matthew Bertagna*** - Pulse Processing of Initial Charged Particle Data from Prototype Thermal Kinetic	***Jessica Wang*** - Photodegradation Mechanism Study of Polypropylene (PP)	***Salihcan Kremer*** - Mechanical Characterization of Through-Glass Vias (TGVs) via Nanoindentation
	11:00 AM	***Thomas Gallagher*** - Characterization of a Scintillation-Based Neutron Detector	***Caleb Vu*** - Reliability Testing of an Underfill and a Thermal Interface Material for Advanced Packaging	***Ethan Tan*** - Characterizing Copper Microstructures for Enhanced Hybrid Bonding Reliability via Nanoindentation
	11:15 AM	***Asher Greenberg*** - Modernizing an Automated Ionization Chamber for secondary radioactivity standards	***Michael Donnelly*** - Automating a Refrigerant Flammability Experiment	***Giorgia Santore*** - Formulating epoxy underfill materials for microelectronics packaging
	11:30 AM	***Kai Tucker*** - Novel Monte Carlo Simulation of High-Purity Germanium Detector for Characterization of NIST Standard X-ray Beams	***Ethan Nee*** - Evaluting Dehumidifer Energy Standards Under Real-World Conditions	***Justin Chen*** - Identifying Process Windows for Crystalline GaN Growth Using Molecular Dynamics
	11:45 AM	**LUNCH**	**LUNCH**	**LUNCH**
Time (ET)	**Host Info**	**Host Laboratory: CTL** **Moderator:** *Wesley Garey* **Zoom Moderator:** *Jian Wang*	**Host Laboratory: EL** **Moderator:** *Katherine Hoffman* **Zoom Moderator:** *Theresa Ginley*	**Host Laboratory: MML** **Moderator:** *Tom Forbes* **Zoom Moderator:** *Trina Mouchahoir*
	12:30 PM	***Josslyn Quansah*** - Analysis Prompt Variation on RLHF LLM Generated Quality		
	12:45 PM	***Andrew Wagger*** - A Look at Decentralized Wireless Networks: Visualizing 5G NR ProSe Scenarios	***Victor Mathias*** - Validating a New Test Method for Pressure Loss in Modern Plumbing Fittings	***Isabella Archiello*** - Using Machine Learning and Atomistic Simulation to Predict Antibody Melting Temperatures
	1:00 PM	***Chloe Thompson*** - Automated Manuscript Compliance Assessment Tool	***Bri Grindrod*** - Pressure Loss Testing of Modern Plumbing Fittings	***Maria Grishaeva*** - The Impact of Surface Amino Acid Mutations on the Solubility of NISTmAb
	1:15 PM	***Kevin Song*** - Edge AI-Enabled Smart LiDAR Sensors for C-V2X ISAC	***Sania Manyem*** - Semantic Interoperability for Cybersecurity in Buildings	***Khanh Nguyen*** - Effect of lipid PEG-ylation on Interactions and Stability of Lipid Particles with Antimicrobial Peptides
	1:30 PM	***Joy Roberts*** - Evaluating V2X Non-Terrestrial Network Performance Through Digital Simulation Tools	***Philip Lee*** - Modeling Photovoltaic Performance from Irradiance Database for Indoor Light Refernce Spectra	***Eleanor Hamby*** - Measurement Science and Standards for Scale-Out Distributed Pharmaceutical Manufacturing
	1:45 PM	***Jonathan Rich*** - C-V2X Network Performance Assessment Tool	***Anna Linteris*** - Characterizing Defects within Silicon Carbide Semiconductors through Hyperspectral Ultraviolet Photoluminescence Spectroscopy	***Amie Zeng*** - Analysis and Visualization of Rapid Street Drug Measurement Data
	2:00 PM	**BREAK**	**BREAK**	**BREAK**
Time (ET)	**Host Info**	**Host Laboratory: CTL & RDCO** **Moderator:** *June Lau* **Zoom Moderator:** *Chandler Becker*	**Host Laboratory: EL** **Moderator:** *Theresa Ginley* **Zoom Moderator:** *Cartier Murrill*	**Host Laboratory: MML** **Moderator:** *Ian Hines* **Zoom Moderator:** *Jackie Mann*
	2:15 PM	***Owen Lin (CTL)*** - Machine Learning Sensing Abstraction for ISAC System Level Simulation	***Dawoon Jung*** - Curating and Encoding ML Asset Metadata into MLLO	***Lindsey Walter*** - Glowing Microbes: Characterizing and Measuring Soil Microbial Communities via Fluorescence
	2:30 PM	***Chitpreet Kaur (RDCO)*** - Getting Instrumental: Developing a Centralized Instrument Database for Scientific Traceability	***Aditya Mishra*** - Vector Database and RAG Integration for Additive Manufacturing Terminologies	***Sophia Yang*** - Inducible Plasmid Copy Number Systems in Cell-Free and Cell-Based Experiments
	2:45 PM	***Sana Girish Rao (RDCO)*** - Streamlining the NIST Public Data Repository Collection Taxonomy Generation	***Mansour Mbow*** - Knowledge Maintenance in Additive Manufacturing: Leveraging MCP AI Agents for Shop Floor Data	***Sheling Cai*** - Machine Learning Classification of PFAS from Liquid Chromatography-Mass Spectrometry Data

	3:00 PM	***Adam Zhu (RDCO)*** - Usage & Discovery Patterns of the NIST Data Repository	***Nimal Muthukumar*** - Mapping Machine Learning Metadata to the Machine Learning Lifecycle Ontology	***Marcos Paulino*** - Characterization of Oropouche Virus RNA
	3:15 PM	***Lucas Rubin (RDCO)*** - The Data Integrity Project:An Ontological Approach to Research Data Integrity in the age of Agentic AI	***Charles Bradshaw*** - Benchmarking the Performance of Mobile Manipulator End Effector Trajectories	***Shannon Horning (COO)*** : A Data-Driven Analysis of NIST Research Visibility in the Life Sciences
	3:30 PM	**BREAK**	**BREAK**	**BREAK**
Time (ET)	**Host Info**	**Host Laboratory: ITL**	**Host Laboratory: EL & TPO**	**Host Laboratory: MML & COO**
		Moderator:	**Moderator:**	**Moderator:** *Hugh Hayes*
		Zoom Moderator: *Yolanda Bursie*	**Zoom Moderator:** *John Bittman*	**Zoom Moderator:** *Jackie Mann*
	3:45 PM	***Walter Roou*** - Lost in Terminology: How Everyday Americans Perceive Digital Identity Language	***McCarthy Devine (EL)*** - Development of Standard Test Artifacts and Hard Gaging Kits for the Dimensional Assessment of Internal Channels in Metal Additive Manufacturing	***Julia Januszewski*** - Shining a Light on Kava: Advanced LC-FLD Method Development for Kava RM Characterization
	4:00 PM	***Isabella Tai*** - Investigating DevSecOps for IoT Device Development	***Alex Tamagno (EL)*** - Implementation of IEEE Standard for Robotic Task Representation in ARIA*C*	***Julia Tisaranni*** - Optimizing the Development of Metal-Organic Frameworks Through Autonomous Design
	4:15 PM	***Shaune Yeboah*** - Modernizing NIST Workforce Guidelines for an Evolving Digital Landscape	***Michael Aladejebi (EL)*** - Temperature Effects on Reciprocity in 6-Port SPHERE	***Rachel Lee*** - Ab Initio Electron-Molecule Scattering Calculations for Methane Using UKRMol+ and ASTRA
	4:30 PM	***Mikias Kelela*** - Looking Through the Noise: Analysis of the Electromagnetic Side-Channel of AES Implementation.	***Kristina Fleck (TPO) -*** Technology Transfer Comparative Case Analysis	***Tejasvi Subramanya*** - Molecular Dynamics Simulation for Water Sorption Effects on Epoxy Electronics Packaging
	4:45 PM	***Brittney Meza*** - Streamlining Digital Identity: Practical Tools for Risk Management and Standards Tracking	***Joy Ghosh (TPO)*** -	***Siena Iavarone-Garza*** - Effect of Semiconductor Packaging Interfaces on the Hygrothermal Response in Polymer Films
	5:00 PM	**END for the Day**	**END for the Day**	**END for the Day**

		Parallel Session #1	Parallel Session #2	Parallel Session #3			Parallel Session #4
Parallel Sessions Thursday, Aug 6, 2026	**Location**	**Gaithersburg, Bldg 101, Heritage Room**	**Gaithersburg, Bldg 101, Portrait Room**	**Gaithersburg, Bldg 101, Lecture Room D**	***SURF Boulder Colloquium Thursday, Aug 6, 2026***	**Location**	**Boulder: Bldg 81, Rm 1A116**
	Zoom Link	https://nist.zoomgov.com/j/1619541627?pwd=tPz5aBzJx2M7i9vrphwLjHJK5gVaXS.1 **Passcode:** 1619541627 **Meeting ID:** 212437	https://nist.zoomgov.com/j/1615780237?pwd=92arHgOojqT02Yst9izLbOPtdAPOMT.1 **Passcode:** 1615780237 **Meeting ID:** 121275	https://nist.zoomgov.com/j/1616477556?pwd=Z2M6Ywv9dRh2xaYzBldZk8Tf8eqAuk.1 **Passcode:** 1616477556 **Meeting ID:** 222229		**Zoom Link**	https://nist.zoomgov.com/j/1605542077?pwd=qYMZ7RqvhBJUx8jrfJDw1jFb3b5k4R.1 **Passcode:** 1605542077 **Meeting ID:** 550568
Time (ET)	**Host Info**		**Host Laboratory: EL** **Moderator:** *Joannie Chin* **Zoom Moderator:** *Ryan Falkenstein-Smith*				
	8:00 AM		***Emma Chang*** - Supporting the Material Flammability Database through Cone Calorimetry Data and Intermediate Scale Flame Spread Apparatus Development				
	8:15 AM		***Christopher Sixbey*** - Commissioning the Controlled Atmosphere Pyrolysis Aparatus (CAPA II)				
	8:30 AM		***Sabrina Rodriguez*** - Best Practices for Characterizing Thermal Radiation from Fires				
	8:45 AM		**BREAK**				
Time (ET)	**Host Info**	**Host Laboratory: ITL** **Moderator:** *Katya Delak* **Zoom Moderator:** *Yolanda Bursie*	**Host Laboratory: EL** **Moderator:** *Joannie Chin* **Zoom Moderator:** *Ryan Falkenstein-Smith*	**Host Laboratory: PML** **Moderator:** *Zachary Levine* **Zoom Moderator:** *Julia Scherschligt*			
	9:00 AM	***Rajeev Raghuram*** - Using Secure Software Development Framework for AI Code Generation	***Edan Miller*** - Advancing Physical AL for Bimanual Pick-and-Place/Insertion Tasks via Imitation Learning from Teleoperation Data	***Thea Bielejec*** - Reestablishing a Cold Atom Experiment for Bose-Einstein Condensate Production			
	9:15 AM	***Samuel Wang*** - Comprehensive Security Analysis and Development of a Testbed for the Openclaw Agentic AI System	***Adithya Nair*** - Benchmarking Known-Object and Zero-Shot 6D Object Pose Estimation Frameworks for Precision Robotic Metrology	***Gretchen Ferguson*** - Algorithmic Optimization of Star-Mesh Quantized Hall Resistance Networks			
	9:30 AM	***Milo Reed*** - Formal BF Specifications of Injection Related CVEs	***Ahikara Sandrasagra*** - Developing a Metric for Human-Exoskeleton Fit	***Esther Kwon*** - Characterizing the Saturated Optical Response of Rubidium Vapor			
	9:45 AM	***Qudus Bawa-Allah*** - Representation learning using Topological Data Analysis for Drug Discovery	***Ilan Shapsay*** - Improving the Trustwothiness of a Deep Learning Model for Heart Health Monitoring	***Tama Padwa*** - Transfer Length Method for Metal–Graphene Contact Resistance Measurement			
	10:00 AM	***Alex Srivastava*** - Deep Condition-Level Analysis of Automatic Speaker Recognition Systems for NIST SRE24	***Arman Sagmanligil*** - Evaluting the Emissions of E-Scooter Fires	***Julian Vye*** - Characterization of an epitaxial graphene QHE device			
	10:15 AM	**BREAK**	**BREAK**	**BREAK**			
Time (ET)	**Host Info**	**Host Laboratory: ITL** **Moderator:** *Ian Soboroff* **Zoom Moderator:** *Yolanda Bursie*	**Host Laboratory: MML** **Moderator:** *Yvonne Gerbig* **Zoom Moderator:**	**Host Laboratory: PML** **Moderator:** *Dan Barker* **Zoom Moderator:** *Zachary Levine*	**Time (MT)**	**Host Info**	**Host Laboratory: SURF Boulder** **Moderator:** *Mustafa A. Omran* **Zoom Moderator:** *Ala Bazyleva*
	10:30 AM	***Anastasia Kutselik*** - Sandbox Data Generation for Forensic Deepfake Guideline	***Angelina Culonga*** - Fiber Composition Detection for Textile Sorting via Spectroscopy	***Jackson "Jake" Bender*** - Orientation-Dependent Errors in Contrast Targets Used with Terrestrial Laser Scanners		**8:40 AM**	**Boulder Colloquium Welcome Remarks:** *Susan Schima*
	10:45 AM	***Kiran Manoj*** - Developing a Scoring Package and Baseline Detectors for Robustness Evaluation in Forensic Deepfake Detection	***Andrew Warrington*** - Development of Metrological Tools for Next-Generation Body Armor Systems	***Graham Dohne*** - Developing a Reference Length Uncertainty Budget for Terrestrial Laser Scanner Interim Testing		**8:45 AM**	***Luca Buccilli (CTL)*** – Laser Interferometer Measurements of Piezoelectric Materials
	11:00 AM	***Vivek Vaidya*** - Developing Benchmark Datasets for Forensic Deepfake Detectors	***Andrew Cotto-Rivera*** - Flexible Armor from Fish: Interlocking Interfaces for Biomimetic Protective Systems	***Kaushik Elavarasu*** - Determining “small” volumes accurately for primary standards		**9:00 AM**	***Teige Bredin (MML)*** – Finite Element Analysis of a Thermal Conductivity Acoustic Resonator
	11:15 AM	***Aaryav Walter*** - Real-time Voice Conversion for Critical Privacy Enhancement	***Noah Lee*** - Wave Propagation and Force Dissipation in Aperiodic Polymer Architected Materials	***Clark Misener*** - Temporal and Spatial Correlations in Vicarious Calibration Measurements: Implications for Satellite Sensor Uncertainty		**9:15 AM**	***Paul Kliewer (PML)*** – Evaluating ML Techniques for Predicting Heisenberg Exchange for MRAM Development
	11:30 AM	***Chloe Hall*** - Application of Object Detection Metrics for Assessing Multi-Finger Segmentation Algorithms	***Aryav Gogia (PML)*** – Diffraction Image Analysis with Artificial Intelligence	***Sylvia Yu*** - In-situ mass measurement and comparison of optomechanical pressure sensors		**9:30 AM**	***Aryav Gogia (PML)*** – Diffraction Image Analysis with Artificial Intelligence; NOTE: Boulder student presenting from Gburg w broadcast to Boulder 81-1A116
	11:45 AM	**LUNCH**	**LUNCH**	**LUNCH**		**9:45 AM**	**BREAK**
Time (ET)	**Host Info**	**Host Laboratory: ITL** **Moderator:** *Simon Su* **Zoom Moderator:** *Yolanda Bursie*	**Host Laboratory: MML** **Moderator:** *Fred Phelan* **Zoom Moderator:**	**Host Laboratory: PML** **Moderator:** Sai Naga Manoj Paladugu **Zoom Moderator:** Zachary Levine	**Time (MT)**	**Host Info**	**Host Laboratory: SURF Boulder** **Moderator:** *Amanda Castillo-Lopez* **Zoom Moderator:** *Ala Bazyleva*
	12:45 PM	***Ryan Kaplan*** - Developing an OpenFOAM-ParaView workflow for indoor airflow visualization in a Testing Facility	***Reagan Elia*** - Developing Polyolefin Blend Standards for Recycling	***Chase Gomes*** - Towards a Portable Compact Blackbody-radiation Atomic Sensor (CoBRAS)		**10:00 AM**	***William Tyler Reichenberg (CTL)*** – MmWave Beamforming Measurement for Spectrum Sharing in Next Generation Communication
	1:00 PM	***Alyse Graham-Martinez*** - Building a tunnable optical delay line	***Johanna Zimmerli*** - Exploration of effective delivery of developed micro- and nanoplastic research test materials	***Gabriel Hernandez*** - Automated Chip-Scale Characterization of Standard Photonic Thermometers (SPoTs)		**10:15 AM**	***Max Huang (MML)*** – Mapping Oxygen-Controlled Modulus Gradients in Vat Photopolymerization by Gap-Dependent Photorheology
	1:15 PM	***Rebecca Gabrielsson*** - Exploratory Topological Data Analysis of PFAS Compounds	***Erin Morrison*** - Broadener-Dependent Oxygen Line Shape Parameters with Exoplanet Atmospheric Significance	***Ramon Perez*** - Doppler Broadening Thermometry		**10:30 AM**	***Liam A. Hofmann (PML)*** – Precision Spectroscopy with Laser Frequency Stabilization for Chip-Scale Atomic Voltage Reference
	1:30 PM	***Henry Nonnemaker*** - Finite Difference Methods for Time-Dependent Modeling of an Optofluidic Flowmeter	***Jackson Rockhill*** - A High-Throughput Workflow for Assessing Sustainable Alloys Developing	***Johnari Price*** - Laser Noise Characterization for Doppler Thermometry		**10:45 AM**	***Heng Yao Shen (PML)*** – Development of RF and Gradient Hardware for 50 mT Low Field MRI
	1:45 PM	***Chris Jia*** - Active Stabilization of SiC Integrated Photonic Resonators for Robust Entangled Photon Generation	***Charlie Hsu*** - Agentic Frameworks in Querying Applications	***Cameron Tchir*** - Multi-fidelity surrogate modeling for optical critical dimension metrology		**11:00 AM**	**LUNCH BREAK**
	2:00 PM	**BREAK**	**BREAK**	**BREAK**		**11:15 AM**	
Time (ET)	**Host Info**	**Host Laboratory: ITL** **Moderator:** *Derek Juba* **Zoom Moderator:** *Yolanda Bursie*	**Host Laboratory: the NCNR** **Moderator:** *Kelsi Rehmann* **Zoom Moderator:**	**Host Laboratory: PML** **Moderator:** *Gordon Shaw* **Zoom Moderator:** *Uwe Arp*	**Time (MT)**	**Host Info**	**Host Laboratory: SURF Boulder** **Moderator:** *Liam A. Hofmann* **Zoom Moderator:** *Teige Bredin*
	2:15 PM	***Arjun Parikh*** - Quantifying Uncertainty of Texture Directionality Prediction By Neural Networks	***Amanda Rosario Rivera*** - Stopped-flow SANS analysis for early-stage kinetics of two pharmaceutically relevant model systems	***Ian Alves*** - Density determination of small mass standards for surface layer correction		**12:15 PM**	***Nicole Kerschner (PML)*** – Optimization of Laboratory User Interfaces for Magnetic Resonance
	2:30 PM	***Vijay Jayasuriya*** - Quantification and Calibration of Uncertainty in ML-Classifiers using Post-Hoc Methods	***Zehra Syeda*** - Effects of pH and ionic strength on the structure and stability of Food Proteins	***Josiah Main*** - Automating in operando Optical Spectroscopy to Probe the Proximity Effect in 2D Materials		**12:30 PM**	***Mustafa A. Omran (CTL)*** – Development of Visualization Frontends for Cellular 5G-NR Measurements
	2:45 PM	***Alvin Guo*** - Using Machine Learning to Modify an Equation of State	***Adriana Montes Lopez*** - Understanding the mechanical instability of model lipid-based drug solutions	***Abhishek Roy*** - Partial Measurement Driven Emergence of Quasiparticles in 1D Lattices		**12:45 PM**	***Christopher Hartman (MML)*** – Computational Exploration and Characterization of Eumelanin
	3:00 PM	***Chelsea Zhang*** - Evaluation of Image Scanning and Sampling Strategies for ML-based Dimensional Measurements of Integrated Circuits	***Harrie Ha*** - Simulating the Effects of Charged Lipids on Bilayer Area Compressibility	***Finn Waltrip*** - A Classroom Kibble Balance: Calibration-Free Mass Measurement		**1:00 PM**	***Romer Rosales-Hasek (MML)*** – Reservoir Replica Exchange for Sampling Inhibitor-Bound ERK2 Conformers
	3:15 PM	***Sophia Lin*** - Metrology for LLM-as-Judge Systems: Validating Grounding, Agreement, Robustness, and Integrity	***Aanya Tiwari*** - Techniques to visualize and quantify monoclonal antibody flexibility from simulations	***Yoon Thwel*** - Developing Interactive Measurement Educational Resources		**1:15 PM**	**BREAK**
	3:30 PM	**BREAK**	**BREAK**	**BREAK**		**1:30 PM**	
Time (ET)	**Host Info**	**Host Laboratory: ITL** **Moderator:** *Derek Juba* **Zoom Moderator:** *Yolanda Bursie*	**Host Laboratory: the NCNR** **Moderator:** *Beth Masimore , NSF* **Zoom Moderator:**	**Host Laboratory: PML** **Moderator:** *Elizabeth Koncki* **Zoom Moderator:** *Uwe Arp*	**Time (MT)**	**Host Info**	**Host Laboratory: SURF Boulder** **Moderator:** *Adriano Cristaldi* **Zoom Moderator:** *Luca Buccilli*
	3:45 PM	***Nan Jiang*** - Benchmarking Instance Segmentation Models for Cross-Modality Automated Cell Segmentation	***Priscilla Ye (MML)*** - From Bulk Sampling to Microscopic Characterization of Lithium-Ion Battery Black Mass	***Dominick Mendez*** - Tracking the Stability of Inter-laboratory Comparison (ILC) Equipment Over Time		**1:45 PM**	***Jason Simental (MML)*** – AI Document Classification and AI Software Development
	4:00 PM	***Ayush Talukder*** - Deep computer vision for meniscus artifact removal from medical images	***Lydia Bullock*** - Building the Next Generation of NMR Software for Polarized Neutron Scattering Instruments	***Matthew Adler*** - Toward efficient coupling between photonic integrated circuits and light sources		**2:00 PM**	***Amanda Castillo-Lopez (CTL)*** – An Exploration of Machine Learning-Based Anomaly Detection for Telecommunications Systems
	4:15 PM	***Ivy Guo*** - Training-free, model-based methods for image segmentation and edge detection	***Henry Pires-Tolsen*** - Analyzing magnetic properties of chemically-tuned nickel compounds	***Mark Amery*** - Development of a Phase Locked Stroboscopic Imaging System for Optomechanical Membranes		**2:15 PM**	***Daniel Fried (MML)*** – The Impact of Segmentation Workflows on Microstructure Analysis
	4:30 PM	***Akshay Manimaran*** - Optimizing an artistic approach to defect detection in advanced semiconductor packages	***Carina Jacobson*** - A scientific wingman: AI co-pilot for triple-axis spectrometer users at the NCNR	***Jesus Romero*** - Integrated Sensors for Barrier Tissue Models in Organ on a Chip Systems		**2:30 PM**	***Joseph Jung (CTL)*** – Fingerprinting Cellular Devices with Shape Analysis
	4:45 PM	***Iliana Johnson*** - Validating the Coefficient of Disagreement for Complex Biological Datasets	***Aditya Purohit (CORE)*** - TASCopilot: Architecture of an AI Research Assistant for Triple-Axis Neutron Scattering at NCNR	***Jeremiah Wiener*** - Hyperspectral Imaging of Semiconductor Quantum Dots		**2:45 PM**	**Boulder Colloquium Concluding Remarks:** *Susan Schima*

END of 2026 SURF Colloquium

THANK YOU! CONGRATULATIONS!