

Poster Presentations

Hameetman Multipurpose Room (MPR)

4:00 - 6:00 PM

Poster Session
Hameetman MPR
4:00 - 6:00 PM

Barbara I. Ayala
University of Puerto Rico,
Mayagüez
Amgen Scholar

Behavioral and Immunological
Consequences of Excessive
Sugar Intake

Yuki Oka
*Professor of Biology;
Investigator, Heritage Medical
Research Institute*
Yameng Zhang
*Graduate Student in
Neurobiology*

Poster Session
Hameetman MPR
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Michael K. Battiest
Pasadena City College
Carl F. Braun WAVE Fellow

Theoretical Spectroscopic
Ellipsometry for Thin Films of
Silicon and Aluminum and
Related Compounds

Austin J. Minnich
*Professor of Mechanical
Engineering and Applied
Physics*
Finley Donachie
*Graduate Student in Materials
Science*

Poster Session
Hameetman MPR
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Bonnie Chen
University of Pennsylvania
*Southern California Edison
WAVE Fellow*

Low-cost Spalled GaAs (110)
Thin Film Solar Cells

Harry A. Atwater
*Howard Hughes Professor of
Applied Physics and Materials
Science*
Andy Nyholm
*Graduate Student in Materials
Science*

Poster Session
Hameetman MPR
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Yen-Ru Chen
University of California,
San Diego

Steering Diffusion Policy for
Controllable Actions in Robot
Manipulation

Aaron D. Ames
*Bren Professor of Mechanical
and Civil Engineering and
Control and Dynamical
Systems*
Damiano Marsili
*Graduate Student in
Computing and Mathematical
Sciences*
Albert Li
*Graduate Student in Control
and Dynamical Systems*

Poster Session
Hameetman MPR
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Margo T. Crothers
Washington University in
St. Louis
*Southern California Edison
WAVE Fellow*

Studies in Calcium Isotope
Speciation in Urine

John M. Eiler
*Robert P. Sharp Professor of
Geology and Geochemistry*
François Tissot
*Professor of Geochemistry;
Investigator, Heritage Medical
Research Institute*
Theo J. Tacail
*Postdoctoral Scholar Research
Associate in Geochemistry*
Rebecca J. Ryan
*Postdoctoral Scholar Research
Associate in Geochemistry*

Poster Session
Hameetman MPR
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Daniel C. Darahdgian
Occidental College

Converting Carbon Dioxide Into
Useful Chemicals and Fuels

Harry B. Gray
*Arnold O. Beckman Professor
of Chemistry*
Aisulu Aitbekova
*KNI Postdoctoral Scholar
Research Associate in Applied
Physics and Materials Science*

Poster Session
Hameetman MPR
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Yichen Di
Tsinghua University

Boosting Generalization in
Neural CFD Surrogates Through
FIGConv Refinement

Anima Anandkumar
*Bren Professor of Computing
and Mathematical Sciences*
Valentin Duruisseaux
*Postdoctoral Scholar Research
Associate in Computing and
Mathematical Sciences*

Poster Session
Hameetman MPR
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Sofia H. Granieri
University of Notre Dame
*Information Science and
Technology (IST) Venerable
WAVE Fellow*

Oxygen Generating Smart
Bandage for Wound
Management

Wei Gao
*Professor of Medical
Engineering; Investigator,
Heritage Medical Research
Institute; Ronald and JoAnne
Willens Scholar*
Kexin Fan
*Graduate Student in Medical
Engineering*

Poster Session
Hameetman MPR
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Amudhan S. Gurumoorthy
*Thomas Hunt Morgan
SURF Fellow*

Observing Sleep Behavior
Within Zebrafish Using
Clustering

David Prober
Professor of Biology
Yun Chiu
*Graduate Student in
Neurobiology*

Poster Session
Hameetman MPR
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Ying-Hsin Hsiao
National Taiwan University
BaBar SURF Fellow

Investigation of the Cancer Cell
Resistance Mechanisms to
p97/VCP ATPase Inhibitor via
Single-Cell and Bulk
Phosphoproteomics

Tsui-Fen Chou
*Research Professor of Biology
and Biological Engineering*
Marion Wan Rion Pang
*Graduate Student in
Bioengineering*

Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Elizabeth Huber</i> Columbia University <i>Rev. Dr. Everett Howe and Dr. Isabella Furth WAVE Fellow</i>	SFB Power Spectrum Emulator: Spherical Fourier-Bessel Power Spectrum Emulation to Constrain Fundamental Cosmology	James J. Bock <i>Marvin L. Goldberger Professor of Physics; Senior Research Scientist, JPL</i> James Cheshire <i>David and Ellen Lee Postdoctoral Scholar Research Associate in Physics</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Dami Kim</i> <i>Lester Lees Aeronautics SURF Fellow</i>	Sensor Fusion System for Infrared-based Fire Detection and Localization	Morteza Gharib <i>Hans W. Liepmann Professor of Aeronautics and Medical Engineering</i> Julian Humml <i>Postdoctoral Scholar Research Associate in Aerospace</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Jinsung Kim</i> Seoul National University	Design and Simulation of an Acoustic Waveguide for Quasi- point Source Generation in Photoacoustic Tomography	Lihong Wang <i>Bren Professor of Medical Engineering and Electrical Engineering</i> Manxiu Cui <i>Graduate Student in Medical Engineering</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Brendan D. Lee</i>	Quantifying Peak-shift Style Exaggeration in Comic Covers and Its Marketplace Signal	Colin F. Camerer <i>Robert Kirby Professor of Behavioral Economics</i> Katelyn Haly <i>Graduate Student in Neurobiology</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Andrea H. Li</i> <i>Crook Family SURF Fellow</i>	Computational Framework for Predicting Acoustic Force Fields in Ultrasound Neuromodulation	Mikhail G. Shapiro <i>Max Delbrück Professor of Chemical Engineering and Medical Engineering; Investigator, Howard Hughes Medical Institute</i> Alen Pavlic <i>Postdoctoral Scholar Fellowship Trainee in Chemical Engineering</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Xiang-Yu Li</i> National Taiwan University <i>BaBar SURF Fellow</i>	Synthesizing and Examining the Novel Magnetic Topological Semimetals Properties of TaCoTe ₂	Linda Ye <i>Assistant Professor of Physics</i> Tao Lu <i>Graduate Student in Physics</i>

Poster Session Hameetman MPR 4:00 - 6:00 PM	Ryan X. Lin University of Oxford	Searching for (Planetary) Nebulae in CLU PTF H α Survey Using Segmentation and Machine Learning Algorithms	Shrinivas R. Kulkarni <i>George Ellery Hale Professor of Astronomy and Planetary Science</i> Soumyadeep Bhattacharjee <i>Graduate Student in Astrophysics</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Marc Moroz Hampden-Sydney College <i>Chen Institute BrainWAVE Fellow</i>	Biochemical Characterization of UFD-3/PLAA Intrinsically Disordered Regions and Their Role in Neurodegenerative Pathogenesis	Tsui-Fen Chou <i>Research Professor of Biology and Biological Engineering</i> Yanping Qiu <i>Postdoctoral Scholar Research Associate in Biology and Biological Engineering</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Nabeeha W. Mubeen Colorado School of Mines	Assembly and Qualification of the Barrel Precision Timing Detector for the High Luminosity Upgrade of CMS at CERN	Maria Spiropulu <i>Shang-Yi Ch'en Professor of Physics</i> Soham Bhattacharya <i>Postdoctoral Scholar Research Associate in Physics</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Stanley A. Muñoz University of California, Los Angeles <i>Center for Evolutionary Science EVO-WAVE Fellow</i>	Interrogating the AtGet3a- AtGet4 Interaction in the <i>Arabidopsis thaliana</i> Guided Entry of Tail-anchored Proteins (GET) Pathway	William M. Clemons, Jr. <i>Arthur and Marian Hanisch Memorial Professor of Biochemistry</i> Conner W. Wells <i>Graduate Student in Chemistry</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Neha Narayan University of Maryland, College Park	Hydroacoustic Analysis of the 2022-2023 Tanaga Island Seismic Unrest	Gabrielle Tepp <i>Staff Seismologist</i> Ross Parnell-Turner Robert Dziak Vaibhav Ingale
Poster Session Hameetman MPR 4:00 - 6:00 PM	Holly L. Nerurker Espinoza University of St Andrews	Hypervelocity Impact Ionisation of Europa-Relevant Ice Grains for SUDA Data Interpretation of NASA's Europa Clipper Mission	Paul D. Asimow <i>Eleanor and John R. McMillan Professor of Geology and Geochemistry</i> Bryana Henderson <i>Scientist, JPL</i> Sankhabrata Chandra <i>Member of the Technical Staff, JPL</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Sophia C. Nicoletta University of Texas at Austin <i>WAVE Fellow</i>	ULX Marks the Spot: Searching for Bright UV Emission Around Ultraluminous X-ray Sources	Fiona A. Harrison <i>Harold A. Rosen Professor of Physics</i> Hannah Earnshaw <i>NuSTAR Calibration and Data Scientist</i>

Poster Session Hameetman MPR 4:00 - 6:00 PM	John I. Ogbu Harvard University <i>KNI SURF-the-WAVE Prize Fellow</i>	Wireless Power Transfer System for Low Power, Millimeter Scale Implantable Biomedical Sensors	Azita Emami <i>Andrew and Peggy Cherng Professor of Electrical Engineering and Medical Engineering</i> Shengsheng Wang <i>Graduate Student in Electrical Engineering</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Amitesh Anand Pandey <i>Kirk and Marjory Dawson Family SURF Fellow</i>	Deep Learning and Coarse Graining on Discrete Element Simulation Data to Learn Constitutive Models for Granular Flow	Kaushik Bhattacharya <i>Howell N. Tyson, Sr., Professor of Mechanics and Materials Science</i> Lianghao Cao <i>Postdoctoral Scholar Research Associate in Computing and Mathematical Sciences</i> Harkirat Singh <i>Postdoctoral Scholar Research Associate in Mechanical and Civil Engineering</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Keaton A. Raney Abilene Christian University <i>Southern California Edison WAVE Fellow</i>	Analysis of the Dimethylallyl Radical Using Pulse Laser Photolysis Cavity Ring-down Spectroscopy	Mitchio Okumura <i>Professor of Chemical Physics</i> Kristen Roehling <i>Graduate Student in Chemistry</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Efe Sakarya <i>Kiyo and Eiko Tomiyasu SURF Scholar</i>	Developing a System to Optimize Microbial Carbon Fixation	Victoria J. Orphan <i>James Irvine Professor of Environmental Science and Geobiology</i> Madison Dunitz <i>Graduate Student in Geobiology</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Hanna P. Shan California State University, Los Angeles <i>Amgen Scholar</i>	Synthesis of Multimechanophore Polymers for the Controlled Release of COS With a Fluorescent Reporter and for Separate Luminescent Systems	Maxwell J. Robb <i>Assistant Professor of Chemistry</i> Yu Ling Tseng <i>Graduate Student in Chemistry</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	Erh-Wei Sheng National Tsing Hua University <i>BaBar SURF Fellow</i>	cuEquivariance Implementation of OrbNet-Equi for Accelerated Orbital Learning and Foundation-Scale Training	Anima Anandkumar <i>Bren Professor of Computing and Mathematical Sciences</i> Beom Seok Kang <i>Graduate Student in Chemical Engineering</i>

Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Jordan L. Threat</i> <i>DaRin Butz SURF Fellow</i>	Experimental Characterization of Ice Spheres Formed Through Fluid Fragmentation and Flash Freezing	Xiaojing Ruby Fu <i>Assistant Professor of Mechanical and Civil Engineering</i> Nathan Jones <i>Graduate Student in Mechanical Engineering</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Shuyu W. van Kerkwijk</i> University of British Columbia	First Light and Characterization of the DSA-2000 Test Array	Vikram Ravi <i>Assistant Professor of Astronomy</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Wenting Ye</i> Emory University	Expanding the CRISPR-Based Toolkit for <i>in vivo</i> Gene Editing in Mammalian Systems	David J. Anderson <i>Seymour Benzer Professor of Biology; Investigator, Howard Hughes Medical Institute</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Kenneth J. Yi</i> <i>J. Weldon Green SURF Fellow</i>	The Thermoelectric Measurements of Ferromagnetic Quantum Materials	Linda Ye <i>Assistant Professor of Physics</i> Takashi Kurumaji <i>Research Professor in Physics</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Pierre A. Zeineddin</i> <i>Franz and Anne Nierlich SURF Fellow</i>	A Synthetic Cell Platform: Development of Protein Expressive + Payload Releasing Vesicles and Their Encapsulation in Hydrogels	Matthew W. Thomson <i>Assistant Professor of Computational Biology; Investigator, Heritage Medical Research Institute</i>
Poster Session Hameetman MPR 4:00 - 6:00 PM	<i>Caroline Zhang</i> Duke University	Formal Theorem Proving With Large Language Models and Reinforcement Learning for the Andrews-Curtis Conjecture	Anima Anandkumar <i>Bren Professor of Computing and Mathematical Sciences</i> Robert Joseph George <i>Graduate Student in Computing and Mathematical Sciences</i>