

# CBB Symposium

## 2022 AGENDA

More info here:



[bit.ly/compactlight2022](https://bit.ly/compactlight2022)

# Poster Session

June 3, 2022 2:00 PM UCLA Faculty Center @ Morrison Room

- Afnan Al Marzouk "Exploring the Impact of Radiation Field on Brightness"
- Vivek Anil "Exploring the Potential of Dirac Semimetals as Low MTE Photocathodes"
- Aasma Aslam "Applications of Machine Learning in Compact Photoinjectors"
- Zhaslan Baraissov "Characterization of Nb and beyond Nb superconducting materials with electron microscopy"
- Eric Cropp "Application of Novel Computational Methods at HiRES"
- AJ Dick "Development and Benchmarking of Optical Stochastic Cooling Computational Model using Experimental Data from IOTA"
- Elena Echeverria "PHOEBE: Current Status and future work"
- Rachael Farber "Sn Adsorption, Diffusion, and Incorporation on (3x1)-O/Nb(100) with Nano-Scale Surface Defects"
- Ben Francis "Superheating Field of Inhomogeneous Surface Layers in Ginzburg-Landau Theory"
- Gabriel Gaitan "Development of a CVD system and testing Nb3Sn CVD on copper cavities"
- Gevork Gevorkyan "Temperature Performance of the ASU DC Cryocooled Electron Gun"
- Jason Gibson ((presented by Ajinkya Hire) "Temperature Performance of the ASU DC Cryocooled Electron Gun" AI-assisted design of photocathodes"
- Juan PabloGonzalez Aguilera "Auto-Differentiable Accelerator Modeling for High-Dimensional Optimization"
- Matthew Gordon "Ultrafast Electron Diffraction with Stray Sextupole Correction"
- Aiden Harbick "A Time-Dependent Ginzburg-Landau Framework for Sample-Specific Simulation of Superconductors for RF Applications"
- Ajinkya Hire "AI design of SRF cavity surfaces"
- Ali Kachwala "Photoemission electron microscope for photocathode studies"
- Michelle Kelley "Ab initio demonstration of the remarkable effectiveness of Helium atom scattering (HAS) as a probe of surface electron-phonon coupling strengths"
- Chis Knill "Nonlinear Photoemission from Cu (100)"
- Gerard Lawler "Cryogenic Brightness-Optimized Radiofrequency Gun (CYBORG)"
- Samuel Levenson "Characterization of Various GaN Samples for Photoinjectors"
- William Li "Beams in 4D: Emittance and MTE from Phase Space Maps"
- Lucy Lin "Exploring Machine Learning Techniques to Improve Cooling Performance at RHIC"
- Joshua Mann "Simulations of Strong Laser Field Emission from Nanoblades and Ab-Initio Validations of the Free Electron Gas Model"
- Chad Pennington "Testing Alkali Antimonide Photocathodes at High Gradients" and "Characterizing photoemission properties and ruggedness of CsSb"
- Chris Pierce "Plasmonic Nanoemitters for Bright Beams"
- Pallavi Saha "Ultrasmooth Alkali-Antimonide Photocathodes"
- Liana Shpani "Improving the nucleation process of tin vapor diffusion based Nb3Sn growth through surface chemistry"
- Nathan Sitaraman "First-principles Study of Zirconium Doping and other Novel High-Tc Recipes"
- Zeming Sun "Materials Investigation and Surface Design of Superconducting Radio-Frequency Accelerating Cavities"
- Caleb Thompson "Modification of the Nb electron-phonon coupling constant at the Nb(100) surface: The influence of the bare metallic surface, oxide reconstructed surface, and Sn adsorption"
- Michael Van Diunen "Bonding and electron-phonon coupling of the Nb(100) surface oxide reconstruction shown by inelastic time-of-flight measurements and density functional theory calculations."
- Sarah Willson "The role of substrate oxide morphology and vapor deposition conditions in promoting Nb3Sn adlayer formation"

