

Session Program

Apr 1 - 2, 2026



2026 HBCU CHIPS Network Conference

Poster Session

Renaissance Atlanta Midtown Hotel, Centennial Ball Room
866 W Peachtree St NW, Atlanta, GA 30308

Wed, April 1

4:05 PM

Poster Session: Poster Session

Poster Session | Location: Hallway

Side-channel Analysis for Hardware Trojan Detection

Speaker

Iain White

Scalable Growth of 2D VS₂: Impact of Process Conditions on Crystallinity and Layer Quality

Speaker

Amari Gayle

A General and Modular Approach to Solid-State Integration of Zero-Dimensional Quantum Systems

Speaker

Ferdous Ara

A Novel Method for Rapid Fabrication of Boron-Doped Luminescent Porous Silicon

Speaker

Elijah Wesley

BipBip: A Lightweight Crypto Algorithm for Open Source Processors and AI Accelerators

Speaker

Alexander Stoyanov-Roberts

Computer Organization Teaching Materials Development

Speaker

Shavaughn Dunson

Design, Simulation, and Measurement of CMOS-Based Ring Oscillator and Operational Amplifier Integrated Circuits

Speaker

Baraka Chimba

Deterministic Integration of MoS₂-Graphene Heterostructures for Future Chip-Scale 2D Electronics

Speaker

Mr Mustafa Ali

Development of TaC substrates for AlGaN power electronics

Speaker

Astrid Dzotcha Kengne

Emergent ferromagnetic correlations and spin textures in the chiral magnet BaFeGaO₄

Speaker

Orrin Delgado

Enhanced electrocatalytic and supercapacitance performances of transition metal oxynitride thin films

Speaker

Warren GloverII

Fabrication and Characterization of Lanthanide-Doped Oxide Materials for Sensing Applications

Speaker

Ms Tiffany Lukusa

Fabrication and Characterization of Surface Acoustic Wave (SAW) Devices

Speaker

Mr Quinten Jones

Finite Element Analysis of 3D-Printed Polymer Lattice Thermal Interface Materials: Effects of Lattice Configuration and Open/Closed-Cell Topology

Speaker

Davian Cartwright

From GaN to Sapphire: How Substrate Influences MoSe₂/MoS₂ Heterostructure Properties

Speaker

Dr M. K. Indika Senevirathna

Green Synthesis of Pectin-Stabilized ZnO Nanocomposites for Photocatalysis

Speaker

Mr Godwill Tewan

In-Depth Analysis of How Various Parameters of Immersive VR-Based Training Influence Performance

Speaker

Sandra Eddie

Intrinsic Ferroelectric Switching in 2D CuInP₂S₆

Speaker

Dion Brumfield

Jumpshot

Speaker

Shavaughn Dunson

Microfluidic device for label-free cell deformation analysis

Speaker

Ayodeji aderin

Microscopic Origin of Polarization Switching in Zr-Doped HfO₂: Real-Space Charge Redistribution and Berry-Phase Branch Analysis

Speaker

Malachi Moody

Optical Characterization of Defects in 4H-SiC for Room Temperature Quantum Sensing

Speaker

Sheikh Mahtab

Raman characterization of MBE grown mixed As-Sb alloy nanowires**Speaker**

Joshua White

Strengthening Education to Workforce Pipelines at HBCUs: Impacts on Career Readiness and Workforce Equity**Speaker**

Abel Phiri

Structural and Optical Characterization of 2D Semiconductors Toward Defect-Based Quantum Sensing with Plasmonic Enhancement**Speaker**

Tanmay Talukder

Structural, magnetic, and thermodynamic properties of Nd₂MoO₆**Speaker**

Foster Kwabena Ontumi

Structural, Optical, and Electrical Analysis of Sputtered Titanium Nitride Thin Films**Speaker**

Brianna Barbee

Real-Time Lightweight Object Detection Pipelines on PYNQ FPGA for Edge Vision Deployment**Speaker**

Enrique Mateo

FPGA Acceleration on PYNQ-Zynq for Efficient Edge AI Workloads**Speaker**

Mr Donovan Jones

Experimental Investigation of 3D-Printed Polymer Lattice Composite Thermal Interface Materials for Semiconductor Packages**Speaker**

Mr Camron Nesbitt

5:00 PM