

Faculty name	Department	Location	Open time	Hosts	Research Interest
Vijaykrishnan Naryanan	Electrical Engineering and Computer Science	354D IST Building	June 5, 4-5 pm	Naga Chllapalle	Optimization of Machine Learning/Artificial Intelligence systems starting from the software stack to underlying hardware architectures and devices.
Zhiwen Liu	Electrical Engineering and Computer Science	213-A Millenium Science Complex	June 6, 4-5 pm	Cheng-Yu Wang	Ultrafast nonlinear optics. His current research is focused on nonlinear imaging, nonlinear spectroscopy, nonlinear nanoprobe for nano-femto optics, applications of holography, and supercontinuum.
Huangyu Cheng	Engineering Science and Mechanics	308 East Electrical Engineering Science Building	June 5, 4-5pm, June 6, 4-5pm	Ning and Micahel	The research in our group focuses on the design and fabrication of the dissolvable tattoo-like sensors with applications ranging from human-machine interface to diagnostic devices
Jian Hsu	Engineering Science and Mechanics	205B Earth and Engineering Sciences Building	June 6, 4-5 pm		semiconductor light emitting devices and use quantum structures to design high efficiency LEDs and laser diodes
Jim Adair	Materials Science & Engineering, Biomedical Engineering, and Pharmacology	Steidle Building Rooms 112 and 113	June 5, 1:30-4:30, June 6, 1:30-4:30		Nanomedical formulations to treat human cancer are developed in these laboratories via nanoparticles that encapsulate drugs and imaging agents

Roman Engel-Herbert	Materials Science & Engineering, Chemistry, and Physics	N118A Millenium Science Complex	June 5, 4-5 pm	Joseph Roth and Tatiana Kuznetsova	We do synthesis of ultrathin films to build crystals up from the fundamental building blocks of matter. Having control over the sequence of atomic layers allows to craft materials never studied before, opening endless possibilities to discover new physics that can be harnessed in novel devices. We grow and characterize the artificial structures we grow by X-ray diffraction, Raman, atomic force microscopy, transmission electron microscopy and link them to optical and electrical properties we measure.
Cui-Zu Chang	Physics	Davey 330	June 5, 4-5pm, June 6, 4-5pm	Morteza Kayyalha	Our lab utilizes molecular beam epitaxy (MBE) to fabricate clean quantum interface materials and hybridize these interfaces with clean functional materials. To examine the quantum phenomena at the interface/surface, scanning tunneling microscopy (STM), angle-resolved photoemission spectroscopy (ARPES), Physical Property Measurement System (PPMS), and 3He-4He Dilution Refrigerator will be involved in our labs

Jun Zhu	Physics	Osmond 6G (basement)	June 5, 4-5pm, June 6, 4-5pm	Hailong Fu	We work on fundamental physics of low-dimensional materials including graphene and edge states of quantum Hall, quantum spin Hall, and quantum valley Hall effect. We are interested in novel device concept, such as valleytronics.
Mikael Rechtsman	Physics	Davey 6 (basement)	June 5, 4-5 pm	Jiho Noh	Topological protection of light: using quantum Hall physics to explore new optical phenomena and to make photonic devices more robust to disorder.
Nitin Samarth	Physics	Davey 35	June 5, 4-5 pm	Tim Pillsbury and Yanan Li	Molecular Beam Epitaxy (MBE) of topological materials and thin film superconductors, with in-vacuo characterization using scanning tunneling microscopy (STM) and Angle Resolved Photoemission Spectroscopy (ARPES)

Zhiqiang Mao	Physics	Davey 347	June 5, 4-5pm, June 6, 4-5pm	Sam Lee and Yanglin Zhu	The Mao group's research at Penn State aims to discover and synthesize novel quantum materials with emergent phenomena and investigate their underlying physics. His current research is focused on four directions: a) novel topological materials, including Dirac, Weyl and nodal-line semimetals and magnetic topological insulators; b) novel low-dimensional (2D) materials with topological quantum states; c) novel unconventional superconductors; d) emergent quantum phenomena in strongly correlated oxides.
--------------	---------	-----------	---------------------------------	----------------------------	--

					<p>Our group constitutes a truly multidisciplinary effort focused on understanding the Physics and Chemistry of materials at the nanoscale. In particular, we study low dimensional materials that mainly involve 1- and 2-Dimensions, ranging from carbon nanotubes and graphene nanoribbons to graphene, boron nitride and chalcogenide monolayers (e.g. WS₂, MoS₂, NbS₂, etc). The group concentrates on challenging synthesis of novel nanoscale materials (1D and 2D) with unprecedented physico-chemical properties. We also focus our research on performing state-of-the-art characterization of the produced materials using electronic transport, photo-transport, Raman spectroscopy, aberration corrected transmission electron microscopy, photoluminescence, electron energy loss spectroscopy, and others.</p>
Mauricio Terrones	Physics and Materials Science and Engineering	315 Osmond	June 5, 4-5pm, June 6, 4-5pm	Ana Laura Elias and Nestor Perea	