Stanford Graduate Student Orientation 2023 SLAC Session - Introduction

Ariel Schwartzman

Philip Schuster, PPA Faculty Chair Philip Bucksbaum, Photon Science Faculty Chair Steve Eglash, Interim Chief Research Officer





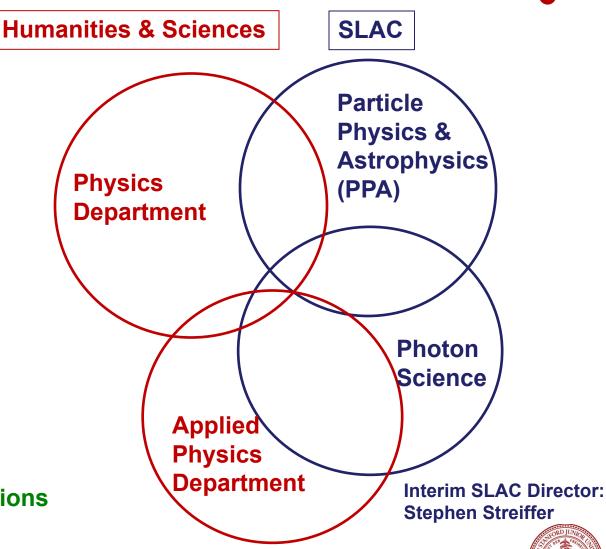
The Stanford Physics Community

A complex structure, but also means more opportunities.

You can choose faculty advisors from 4 departments

SLAC as a national lab and an academic unit is unique to Stanford/SLAC

1st year rotations may help you explore these connections





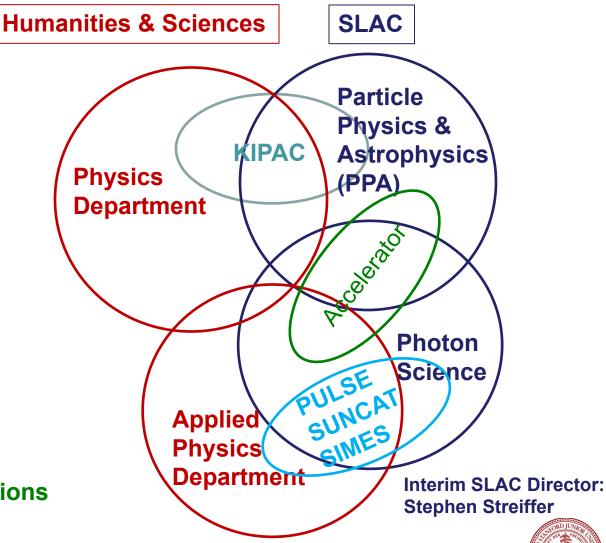
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Research at SLAC

Diverse research activities at SLAC are summarized at https://www6.slac.stanford.edu/research

- Accelerator Research
- Astrophysics and cosmology
- Elementary particle physics
- Quantum Information Science
- X-ray and Ultrafast Science
- Environmental Science
- Materials, Chemistry & Energy Sciences
- Matter in Extreme Conditions
- Machine Learning
- Scientific Computing





Resources at SLAC

- The vast resources at national lab is for you to take advantage of for your own education
 - Accelerator facilities
 - Staff scientists with broad range of expertise
 - Computing and software expertise
 - Engineering expertise
 - Schools, Workshops, Colloquia, Seminars
- Marguerite shuttles
 SLAC Line operates 7:00am~8:20pm between campus and SLAC every 40min on weekdays.
 Line S has peak hour services between campus, Palo Alto CalTrain station and SLAC.







SLAC Contacts and Information

•SLAC PPA faculty:

- Chair: Prof. Philip Schuster
- Graduate Student Program: Prof. Ariel Schwartzman
- Graduate Student Support: Adrienne Higashi
- PPA faculty list: https://faculty.slac.stanford.edu/particle-physics-astrophysics-faculty

•SLAC Photon Science faculty:

- Chair: Prof. Philip Bucksbaum
- PS faculty list: https://faculty.slac.stanford.edu/photon-science-faculty





SLAC Orientation Program

Program/Presentation	Speaker
Introduction	A. Schwartzman
Accelerator Physics	A. Marinelli
Particle Physics and Astrophysics	H. Tanaka
Theory at SLAC	A. Friedland
Photon Science	M. Kling
	Introduction Accelerator Physics Particle Physics and Astrophysics Theory at SLAC

https://indico.slac.stanford.edu/event/8406/

10:30 - Noon: Refreshments, Poster Session and informal discussions

Noon- 1:00 pm: Lunch and Poster session

1:00 – 5:00 pm: <u>Lab Tours and Research Discussions</u>

1:00 – 5:00 pm: Faculty Office Hours

1:00 – 2:00 pm: Meet the SLAC Theory Group fo Cake

1:00 – 2:30 pm: **FACET-II Experimental Area**

1:00 – 2:30 pm: **LCLS Tour**

1:00 – 2:30 pm: Particle Physics, Cosmology, and Quantum Experiments: CMB, CDMS, ADMX,

DMRadio, ATLAS, LZ, and LSST Labs

