Stanford Graduate Student Orientation 2024 SLAC Session - Introduction

Ariel Schwartzman

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





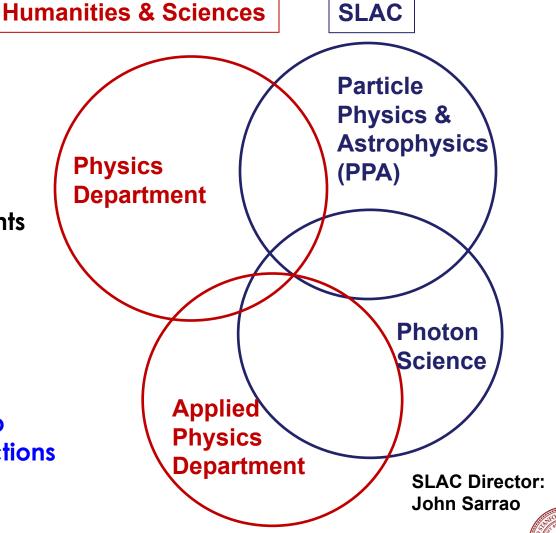
The Stanford Physics Community

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





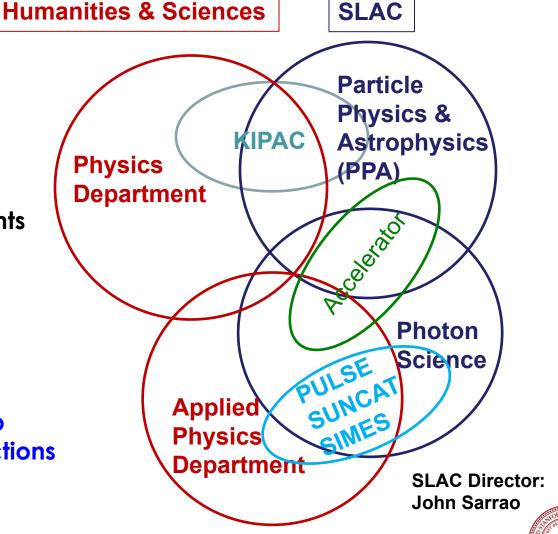
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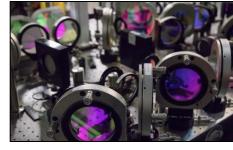


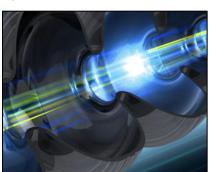
Research at SLAC

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 40 min on weekdays.
 Line S has peak hour services between campus, Palo Alto CalTrain station and SLAC.







SLAC Contacts and Information

SLAC PPA faculty:

- Interim Chair: Prof. Lance Dixon
- 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

Time	Program/Presentation	Speaker
9:30 – 9:40	Introduction	A. Schwartzman
9:40 – 10:00	Accelerator Physics	S. Gessner
10:00 – 10:20	Particle Physics and Astrophysics	H. Tanaka
10:20 - 10:40	Theory at SLAC	B. Mistlberger
10:4011:00	Photon Science	B. Ofori-Okai

https://indico.slac.stanford.edu/event/9136/

11:00 – Noon: Refreshments, poster session and informal discussions in main lobby

11:30 – Noon: Lunch pickup in lobby

11:30 – 13:00: Poster sessions continue

13:00 – 14:00 Office hours: ATLAS, HPS/LDMX, DUNE, nEXO, LZ, LCLS, FACET, CMB, QIS

14:00 - 16:00 **Lab tours**

Link to schedule

13:00-14:00	LCLS Experiment al Hall tour (Diling Zhu, Sandra Mous). ~ 1.5 hours, meet at main lobby, Bldg 53	ATLAS group meeting (B84) (Julia Gonski)	FACET office hours (Brendan O'Shea, Mark Hogan) (B52)	CMB Lab Tour to the Millikelvin Facility (Shawn Henderson, Kirit Karkare) (meet outside B53 lobby to walk to B33)	DMQIS/CDMS Lab Tour (Joint with CMB)	nEXO Lab tour (B84) (Peter Rowson)	DUNE Group (Convery, Tanaka) Bldg 84, B171	HPS and LDMX (B84, B200) Tim Nelson	LZ group office hours (Akerib, Shutt, Monzani) in Kavli 223
14:00-16:00		ATLAS ITk lab tour (B84, B33) (Su Dong, Prajita Bhattarai)	FACET Lab tour (Brendan O'Shea, Mark Hogan)	CMB Coffee and office hours (Shawn Henderson, Kirit Karkare) Kavli 222	DMQIS/CDMS Coffee and office hours (Kurinsky, Stifter) Kavli 311-313	nEXO Lab tour (B84) (Peter Rowson)	DUNE Group (Convery, Tanaka) Bldg 84, B171	HPS and LDMX (B84, B200) Tim Nelson	LZ/XLZD lab tour - IR2 (Akerib, Shutt), meet at Kavli 223



