The National Science Foundation and the Topical Group in Plasma Astrophysics (GPAP) of the American Physical Society - Division of Plasma Physics present

the 2nd biennial

NSF/GPAP SUMMER SCHOOL

on plasma physics for astrophysicists

WELCOME!

(to your room)

Matthew Kunz
Princeton University

Mike Brown
Swarthmore College

Libby Tolman
IAS

Kristopher Klein
University of Arizona

Eve Ostriker
Princeton University

Lorenzo Sironi
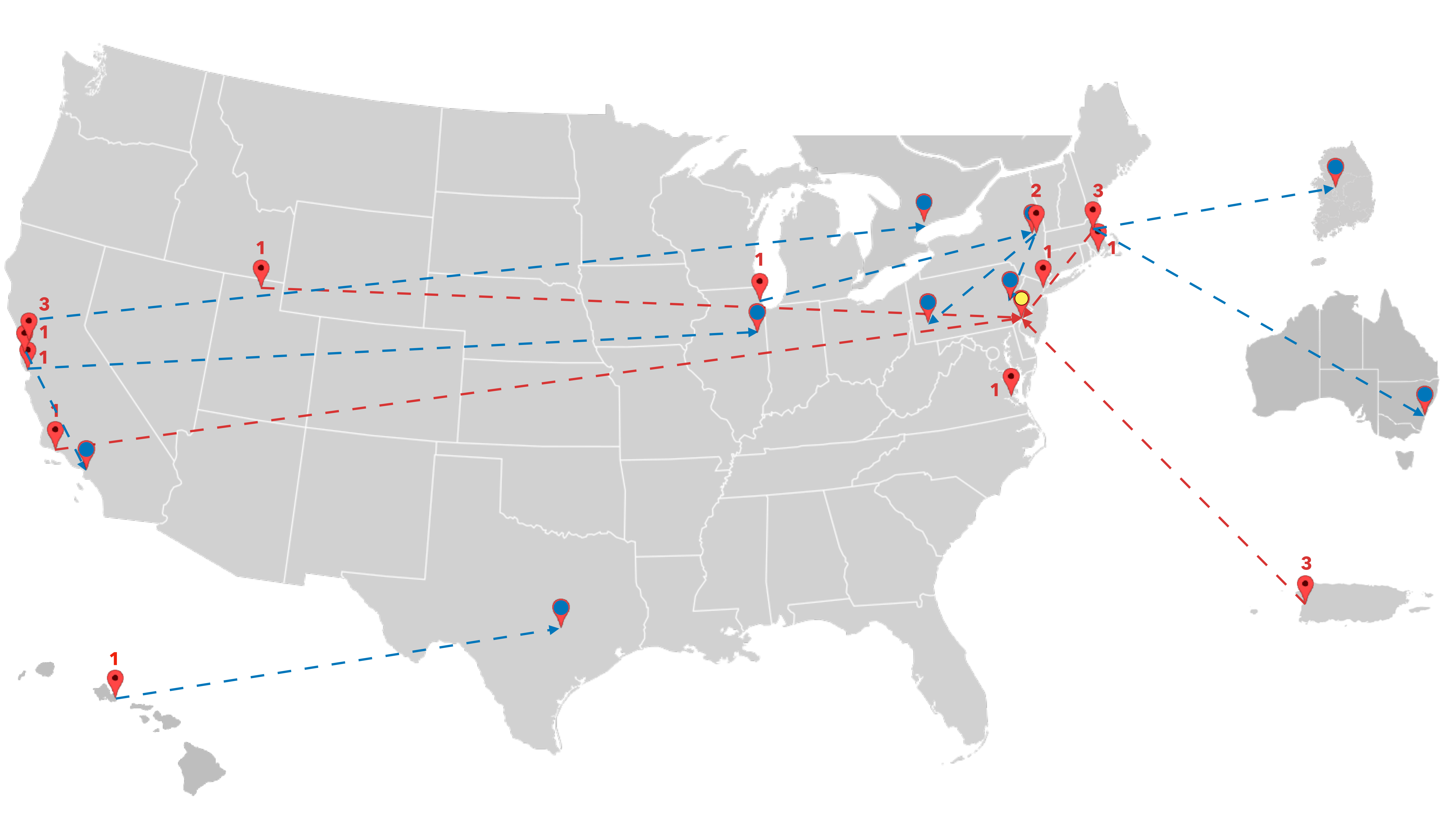Columbia University

Nuno Loureiro
MIT

Louise Willingale
University of Michigan

Frederico Fiuza
SLAC

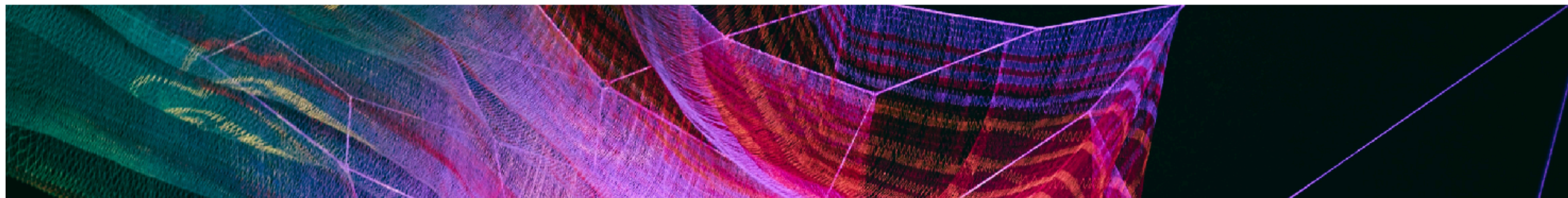Vanessa Gonzalez-Perez
Princeton University

PDT	EDT	KST	AEST	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
7:00am	10:00am	11:00pm	12:00am	Welcome and Introductions	MHD and Linear Waves (Tolman)	MHD Instabilities and Flows (Ostriker)	Particle Motion (Tolman)	HEDP and Laboratory Astro (Willingale)
7:15am	10:15am	11:15pm	12:15am					
7:30am	10:30am	11:30pm	12:30am	Overview of Astrophysical and Space Plasmas (Kunz)				
7:45am	10:45am	11:45pm	12:45am					
8:00am	11:00am	12:00am	1:00am					
8:15am	11:15am	12:15am	1:15am				Introduction to Kinetic Theory, I. (Loureiro)	
8:30am	11:30am	12:30am	1:30am					
8:45am	11:45am	12:45am	1:45am					
9:00am	12:00pm	1:00am	2:00am					
9:15am	12:15pm	1:15am	2:15am	Breakfast or Lunch or Nap	Breakfast or Lunch or Nap	Breakfast or Lunch or Nap	Breakfast or Lunch or Nap	Breakfast or Lunch or Nap
9:30am	12:30pm	1:30am	2:30am					
9:45am	12:45pm	1:45am	2:45am					
10:00am	1:00pm	2:00am	3:00am	Fundamentals of Fluid Dynamics (Kunz)	MHD Instabilities (Kunz)	Problem Session	Introduction to Kinetic Theory, II. (Klein)	Numerical Methods in Plasma Astrophysics (Fiuza)
10:15am	1:15pm	2:15am	3:15am					
10:30am	1:30pm	2:30am	3:30am					
10:45am	1:45pm	2:45am	3:45am					
11:00am	2:00pm	3:00am	4:00am			MHD Shocks (Sironi)		
11:15am	2:15pm	3:15am	4:15am					
11:30am	2:30pm	3:30am	4:30am					
11:45am	2:45pm	3:45am	4:45am		SSX livestream (Brown)			
12:00pm	3:00pm	4:00am	5:00am					
12:15pm	3:15pm	4:15am	5:15am	Lunch or Snack or Early Breakfast	Lunch or Snack or Early Breakfast	Lunch or Snack or Early Breakfast	Lunch or Snack or Early Breakfast	Lunch or Snack or Early Breakfast
12:30pm	3:30pm	4:30am	5:30am					
12:45pm	3:45pm	4:45am	5:45am					
1:00pm	4:00pm	5:00am	6:00am	Fundamentals of Plasma Physics (Brown)	Introduction to Fluid and MHD Turbulence (Klein)	Magnetic Reconnection (Loureiro)	High-Energy Plasma Astrophysics (Sironi)	Problem Session
1:15pm	4:15pm	5:15am	6:15am					
1:30pm	4:30pm	5:30am	6:30am					
1:45pm	4:45pm	5:45am	6:45am					
2:00pm	5:00pm	6:00am	7:00am					
2:15pm	5:15pm	6:15am	7:15am					Navigating Grad School Vanessa Gonzalez-Perez
2:30pm	5:30pm	6:30am	7:30am					
2:45pm	5:45pm	6:45am	7:45am					
3:00pm	6:00pm	7:00am	8:00am	End of Day	End of Day	End of Day	End of Day	End of Day

Please visit

https://www.gpapschool.com/program-2021

for the schedule, lecture notes, and problem sets

**Please join
APS and GPAP!**

It should be free to do so
as a student member.

https://www.aps.org
/membership/join.cfm

APS physics

Topical Group in Plasma Astrophysics

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Topical Group in Plasma Astrophysics

The Topical Group advances plasma astrophysics—an interdisciplinary body of knowledge that seeks common ground between plasma physics and astrophysics, and involves the application of fundamental concepts of plasma physics to the solution of outstanding problems in astrophysics.

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📅 **Meetings & Events**

APS March Meeting 2022

2022 Mon Mar 14th - Fri 18th

Chicago, IL

APS April Meeting 2022

2022 Sat Apr 9th - Tue 12th

New York, NY

Jun 6, 2021 10:06 PM

David A Schaffner

Registration is now open for the inaugural Plasma Hack Week to be held remotely from June 28 to July 2, 2021. The PlasmaPy project is coordinating with other members of the open-source code community to organize a *free* virtual week of programming tutorials and communal coding activities. For those who may be unfamiliar with the term, a hack week is a combination of a hackathon (a marathon of hacking-i.e. computer programming) and a summer school. While hackathons have traditionally prioritized collaborative code development activities, a hack week includes a teaching component. Hack weeks typically have both structured learning activities (such as tutorials) as well as unstructured project time.

For this hack week, we anticipate presenting hands-on tutorials on plasma community programming platforms including OMFIT, BOUT++, SunPy, Gkeyll, TurboPy, and PlasmaPy. We will also include more general tutorials on:

- How to use git/GitHub
- How to implement software testing
- How to contribute to an open-source project
- How to work with uncertainties in your code
- How to write clean code

All levels of coders are welcome, and no prior experience is necessary. There will also be opportunity to meet with other plasma coders in your community through both unstructured and structured coding sessions, as well as some opportunity for social interaction!

For more information about the Plasma Hack Week, visit https://hack.plasmapy.org/. You can register to participate in this *free* virtual event here. For questions or comments, join our Discord.

Hello world! We are pleased to announce that the inaugural **Plasma Hack Week** will be held remotely from June 28 – July 2, 2021.