

# uwip at UC San Diego

### **UWiP February Newsletter**

#### **UWiP Mission Statement**

Undergraduate Women in Physics at UCSD (UWiP) is an organization dedicated to promoting women and other underrepresented minorities in physics by connecting students to community support and providing academic/professional resources. Some of our most popular events include Coffee & Tea with Professors, Study Jams, Panels, Movie Nights, Women in Physics Presentations, and a lot more!



#### **Important Dates to Save for Winter '21!**

<u>President's Day Holiday</u>: Monday, February, 15 <u>Finals Week</u>: Saturday, March 13 - Saturday March, 20 <u>End of Winter Quarter</u>: Saturday, March 20

#### **COVID-19 VACCINATIONS COMING SOON:**

The country is finally moving to phases of vaccination! Be on the lookout for when students will be able to make an appointment to get the vaccine. Below we have linked some Covid-19 Vaccination information for San Diego, Los Angeles County, and California. If the area you are currently in is not listed below, we encourage you to take few **minutes** to look up the Covid-19 vaccination plan in your area!

<u>San Diego County COVID-19 Vaccination Phases</u>: It does not look like SD county is currently vaccinating people who are non-health care workers or those under 65. Phase two seems to be when they will begin opening it up to the public over age 16, but keep a look out for changes.

Los Angeles County COVID-19 Vaccination Phases: LA county is currently not currently vaccinating people who are under 65 with no pre-existing conditions.

These groups will be opened up to in phase two, similar to SD county.

<u>General California Information about the COVID-19</u>: Check this page out to even sign up for COVID-19 vaccination notifications!

In the meantime, we hope everyone continues to stay safe and make smart decisions. We can only get through this together and come out stronger!



#### **All Events Flyer**

Our detailed Winter 2021 flyer will be out as soon as all our events are finalized. For now, here is an exclusive look at some events you can expect in the coming weeks. As always, the details for each event will be on the UWiP website, emailed, and posted to our Instagram. We hope you are as excited for these events as we are!

#### Winter '21 Survey

Let us know which events you are excited for with this brief <u>survey</u>! Forward this to some friends that might be interested in UWiP too!

### Member of the Month Shoutout!

Every month we will be doing a "Member of the Month Shoutout" based on participation at UWiP events! We love having each and every one of you attend, and engage with our community. This is how we like to say thanks for all you do!

This month we have <u>Brigette</u> <u>Vasquez</u>, she's attended our Community Game Night and our Coffee & Tea series so far. Get to know one of our fellow physics majors, Brigette, a little better!



Q: What UWIP event have you enjoyed most so far this quarter?A: I enjoyed coffee & tea with the professors. It was fun getting to know what each professor was interested in and it made me feel motivated.

Q: What are some of your favorite hobbies, aka what do you like to do with your free time when you're not studying physics?

A:One of my favorite hobbies is making smoothies with a lot of different fruits and granola. I also enjoy watching fashion shows, my favorite is always Chanel. But my favorite hobby of all time is just walking at the beach or to any destination with my friends.

Q: And lastly, if you were stuck on a deserted island and could only bring one book or movie, what would it be?

A: I would bring the movie Clueless with me because it never gets old.



Below you will find all the UWiP events and their details (\*some still to come\*) for the month of February! Keep up your studying but don't forget to take a break and get to know your UWiP community and all our organization has to offer for our fellow peers interested in physics!

#### GRADUATE STUDENT PANEL: Wed Feb 10, 2-3 PM

Are you thinking about going to grad school? We are too! That's why we're hosting a panel with several UCSD physics graduate students so you can learn more whether graduate school is right for you and what the application process is like.

Feel free to come with questions!



#### Graduate Student Panel

Wednesday, February 10 | 2-3PM Meeting ID: 991-3454-5621



#### PALENTINES MOVIE NIGHT (*About Time*): Fri Feb 12, 7-9 PM

Grab a pal and celebrate Valentines Day with us! We'll be watching the romantic comedy-drama film *About Time*. Check out the movie description below and stock up on those chocolates and tissues!

"At the age of 21, Tim discovers he can travel in time and change what happens and has happened in his own life. His decision to make his world a better place by getting a girlfriend turns out not to be as easy as you might think." - IMDb

#### FEMALE PROFESSORS PANEL: TBA

We can learn a lot from our female physics faculty here at UCSD! Join UWiP for a special female professors panel as we dive into question like "What is it like being a female professor at UCSD?", "What struggles do women face in academia?", and any questions you may have!



#### **Weekly Board Meetings**



If you are interested in planning future events or just getting more involved, consider attending some of our weekly board meetings. UWIP Board Applications are coming up and we would love to have your input! Email us for meeting details or feel free to reach one of our Co-Presidents, Trinity (tcarrasc@ucsd.edu) or Mikaela (mmlarkin@ucsd.edu).

## PHYSICS AT UCSD

#### New Month, New Exciting Opportunities!

We know you  $\heartsuit$  physics like we do, and this February there's a lot of physics love to go around! Keep the spark alive by checking out a cool seminar, and remember the Department resources are there to inform and support you through every step of your journey.

You + Physics = a love that will last a lifetime!

#### **Explore Your Resources!**

Everything you need to know about

The Physics Department Seminar

Undergraduate Events and Opportunities in Physics, together in a Google Calendar!

information on department seminars and colloquia!

**Events and Opportunities** 

Browse a collection of fliers and important reminders in the Opportunities folder.

Opportunities Folder

**Physics Seminars** 

Calendar is your go-to resource for

the most complete and up-to-date

When in doubt, find it out! The Physics Department Handbook has tons of useful information for you to reference.

#### Department Handbook

#### Featured Seminars

*Physics Colloquium: "The Magic of Moiré Quantum Matter"* Prof. Pablo Jarillo-Herrero, MIT

- Thurs 2/04 at 4pm
- Abstract available <u>here</u>
- Zoom link: <u>https://ucsd.zoom.us/j/93730100055?</u> pwd=eFl2ZGw5WExKSU1JSy9lbXp1ZGxXUT09

Physics Colloquium: "Active Topology"

Cristina Marchetti, UC Santa Barbara

- Thurs 2/11 at 4pm
- Abstract available here
- Zoom link: <u>https://ucsd.zoom.us/j/93730100055?</u> pwd=eFl2ZGw5WExKSU1JSy9lbXp1ZGxXUT09

#### Stay Inspired, Tritons!

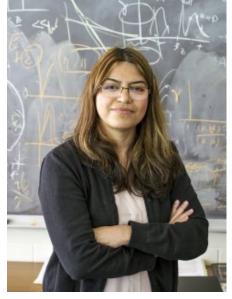


# **Women in Physics News**

## Physicist invents new rocket engine

Dr. Fatima Ebrahimi is a Principal Research Physicist at the Princeton Plasma Physics Laboratory (PPPL), specifically she works in the Theory Department. Dr. Ebrahimi made headlines recently for her new rocket design which would use magnetic fields to shoot plasma particles, a mechanism that would effectively act as a thruster. So how would this work, and what would this mean for space travel?

According to Ebrahimi, when plasma particles (electrically charged gas) are accelerated via <u>magnetic reconnection</u>, the energy generated is "virtually inexhaustible." The process of magnetic reconnection is essentially when magnetic field "lines" come together, separate, and then recombine once more, the phenomenon responsible for solar flares. This concept also outperforms current models of plasma thrusters, which use electric fields to propel particles instead of magnetic fields. Computer simulations have shown that the



latter method provides speeds up to 10 times faster than other thrusters.

Dr. Ebrahimi formulated this idea since 2017 and credits her work in fusion energy as inspiring her to create a link between plasmoids and magnetic reconnection as an application for space travel. "...if we make thrusters based on magnetic reconnection, then we could conceivably complete long-distance missions in a shorter period of time," she said. Next on her to-do list is to create a prototype!

We in the physics community and space-travel fanatics alike are excited to see Ebrahimi's idea actualized! Next stop.... Jupiter?

Source credit: <u>https://www.msn.com/en-us/news/technology/scientist-invents-new-plasma-engine-for-rockets/ar-BB1dd3Cb?</u> ocid=uxbndlbing#image=3

Thank you for checking out our newsletter and we hope you enjoyed it. We love hearing from our general members, so don't hesitate to reach out! If you have any suggestions, questions, or would like to contribute to our newsletter team just send us an email at uwip.ucsd@gmail.com. If you loved our newsletter and would like us to feature an event of yours or you have some cool info to share for next month's newsletter, please fill out this <u>form</u>.

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