NSF HDR Postbaccalaureate Workshop 2023

Report of Contributions

Contribution ID: **2**   Type: **not specified**

Welcome

Tuesday 20 June 2023 09:00 (20 minutes)

Presenter: DUARTE, Javier Mauricio (Univ. of California San Diego (US))

Session Classification: Introduction

Contribution ID: **3** Type: **not specified**

Bottom-up manifold learning with low distortion

Tuesday 20 June 2023 09:20 (1 hour)

Presenter: Prof. MISHNE, Gal (UC San Diego)

Session Classification: Introduction

Contribution ID: 4   Type: **not specified**

Anomaly Detection at CMS L1 Trigger

Tuesday 20 June 2023 13:30 (20 minutes)

Presenter: SKIVINGTON, Andrew (University of California-San Diego, Duarte Lab)

Session Classification: Postbac/Student Symposium

Contribution ID: **5**   Type: **not specified**

Symposium - 4 talks

Session Classification: Postbac/Student Symposium

Contribution ID: **6**　　　　　　　　　　　　　　　　　　　Type: **not specified**

Townhall for feedback

Wednesday 21 June 2023 09:00 (1 hour)

Presenter: DUARTE, Javier Mauricio (Univ. of California San Diego (US))

Session Classification: Towhall

Contribution ID: **7**   Type: **not specified**

Training (Writing Workshop?)

Session Classification: Towhall

Contribution ID: **8**   Type: **not specified**

Academia/Industry Panel

Tips for academia and industry

Session Classification: Postbac/Student Symposium

Contribution ID: **9**   Type: **not specified**

Visual Alchemist: Visualization tool for data-driven materials science

Tuesday 20 June 2023 13:55 (20 minutes)

Bruktawit Teklay Amare is an ID4 postbaccalaureate fellow working with Professor Alvitta Ottley at Washington University in St. Louis on developing visual analytic tools to support domain scientists in the material discovery process.

Presenter: AMARE, Bruktawit Teklay (Washington University in St. Louis)

Session Classification: Postbac/Student Symposium

Contribution ID: **10**   Type: **not specified**

Using convex feature selection to improve offline movement decoding

Tuesday 20 June 2023 14:20 (20 minutes)

Lauren Peterson is an A3D3 postbaccalaureate fellow working with Professor Amy Orsborn at the University of Washington on neuroscience.

Presenter: PETERSON, Lauren

Session Classification: Postbac/Student Symposium

Contribution ID: **11**　　　　　　　　　　　　　　Type: **not specified**

Coffee

Session Classification: Introduction

Contribution ID: **12**   Type: **not specified**

Observing Scenarios and Low Latency EM Training

Tuesday 20 June 2023 10:40 (20 minutes)

Abigail Gray is an A3D3 postbaccaulareate fellow working with Professor Michael Coughlin at the University of Minnesota on multimessenger astronomy.

Presenter: GRAY, Abigail (University of Minnesota)

Session Classification: Postbac/Student Symposium

Contribution ID: **13**　　　　　　　　　　　　　　　　Type: **not specified**

Denoising Autoencoder for raw, wireplane, waveforms in DUNE's LArTPC detector

Tuesday 20 June 2023 11:30 (20 minutes)

Van Tha Bik Lian is an A3D3 postbaccalaureate fellow working with Professor Kate Scholberg at Duke University on the Deep Underground Neutrino Experiment (DUNE).

Presenter:　LIAN, Van Tha Bik (Duke University)

Session Classification:　Postbac/Student Symposium

Contribution ID: **14**   Type: **not specified**

Surrogate models to predict storm surge hydrodynamics over evolving landscapes and climate forcings

Tuesday 20 June 2023 11:05 (20 minutes)

Mohammed is a Ph.D. student at Purdue University working on hydrology and water resources, and artificial intelligence. He is part of the I-GUIDE project. Hid presentation today about Surrogate models to predict storm surge hydrodynamics over evolving landscapes and climate forcings

Presenter: GHAREHTORAGH, Mohammad Ahmadi (Purdue University)

Session Classification: Postbac/Student Symposium

Contribution ID: 15   Type: **not specified**

How to write a research paper

Wednesday 21 June 2023 10:20 (40 minutes)

Presenter: KHODA, Elham E (University of Washington (US))

Session Classification: Professional Development

Contribution ID: **16**   Type: **not specified**

Interactive session

Wednesday 21 June 2023 11:00 (40 minutes)

Presenter: KHODA, Elham E (University of Washington (US))

Session Classification: Professional Development

Contribution ID: 17　　　　　　　　　　　　　　　　　Type: **not specified**

Panel

Tuesday 20 June 2023 15:00 (1h 20m)

Panelists:

Ben Kries is a Senior Data Scientist at Apple. Previously he was a postdoctoral research associate at Fermilab. He received his Ph.D. in physics at Cornell University.

Philip Hebda is Senior Data Scientist at Roblox. He was previously at Pinterest and Netflix. He received a Ph.D. in physics at Princeton University.

Rushil Roy is System Engineer at Qualcomm. He received his bachelor's degree in Electrical Engineering with a specialization in Machine Learning and Controls at UC San Diego.

Olivia Weng is a Ph.D. student in Computer Science and Engineering at UC San Diego.

Christian Aganze is a Ph.D. student in Astrophysics at UC San Diego.

Anthony Aportela is a Ph.D. student in Physics at UC San Diego.

Questions:

What kinds of positions did you consider in your job search and why?
What are the most useful skills in your current job that you learned during your undergraduate career?
If you conducted research during your undergraduate career, how useful was that experience for your current position?
What do you wish you knew before you started applying to your current career?
Are there any skills you wished you had developed more before your current position?
How has work/life balance impacted your current career and career progression?
Where do you see your career progressing in the next 5 years?

For those that went to grad school:

What made you decide to go to graduate school?
What about graduate school is different from your expectations as an undergraduate?

For those in industry:

What made you decide to go into industry rather than academia?
What surprises you most about working in industry?
What backgrounds (majors, previous careers, etc.) or skills does your company look for in hiring?

Presenters:　APORTELA, Anthony Vizcaino (Univ. of California San Diego (US));　KREIS, Ben (Fermi National Accelerator Lab. (US));　AGANZE, Christian (UC San Diego);　WENG, Olivia;　HEBDA, Philip (Princeton University (US));　ROY, Rushil

Session Classification:　Academy/Industry Panel

Contribution ID: **18**   Type: **not specified**

Discovering Ultracool Dwarfs in Deep Surveys using Machine Learning Methods

Tuesday 20 June 2023 11:55 (20 minutes)

Malina Desai has recently graduated from the Physics Department at UC San Diego. She will start as an A3D3 postbaccalaureate fellow this summer, working with Dr. Erik Katsavounidis and Professor Phil Harris at MIT on multimessenger astronomy.

Presenter: DESAI, Malina (UC San Diego)

Session Classification: Postbac/Student Symposium