

# Welcome to the Nuclear Science Division

## **Lisa Schlueter (July 2023)**

Postdoc - Neutrinos

Lisa joined us after receiving her PhD at the TU Munich and Max-Planck Institute for Physics.

Working on LEGEND and development of graphene instrumentation for direct VUV photon detection



## **Karthika Balan (Aug. 2023)**

Sr. SEA- ANP

Karthika joined us from Ford M.C. where she was an autonomy engineer; PhD 2023, Electrical and Computer Engineering, University of Detroit Mercy

She will be working on developing autonomous radiological inspection and robotics.



## **Yuxun Guo (Sept. 2023)**

Postdoc - Theory

Yuxun joined us after receiving his PhD at the University of Maryland

He is working on EIC theory, in particular gluonic tomography of the nucleon, with partial support from the QGT topical collaboration.



## **Thomas MacDonald (Sept. 2023)**

Sr. SEA- ANP

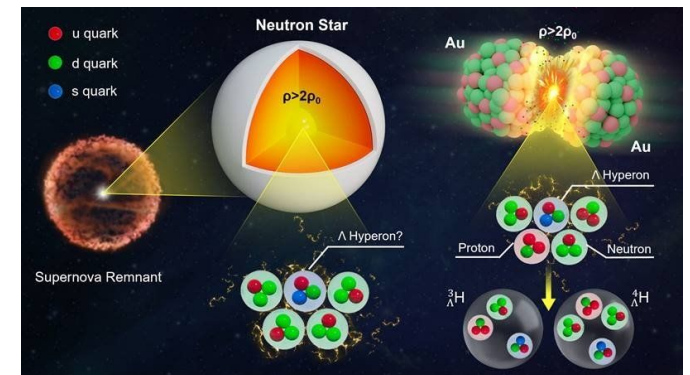
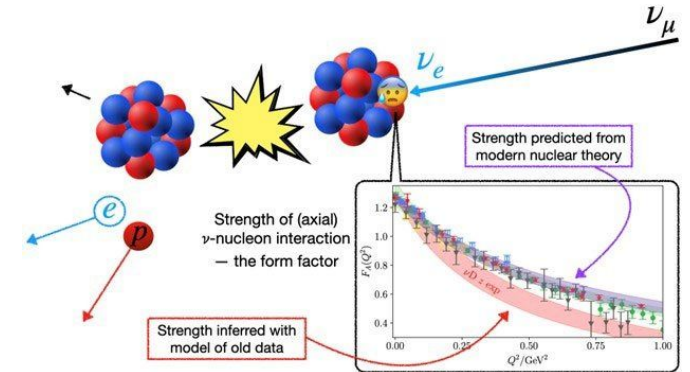
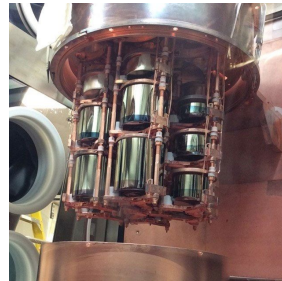
Thomas joined us after being a Nuclear Policy Fellow at the Carnegie Endowment for International Peace, Washington DC; PhD, 2021, MIT Nuclear Science & Engineering

He will be working on projects related to radiation detection and data fusion.



# Selected Science Highlights

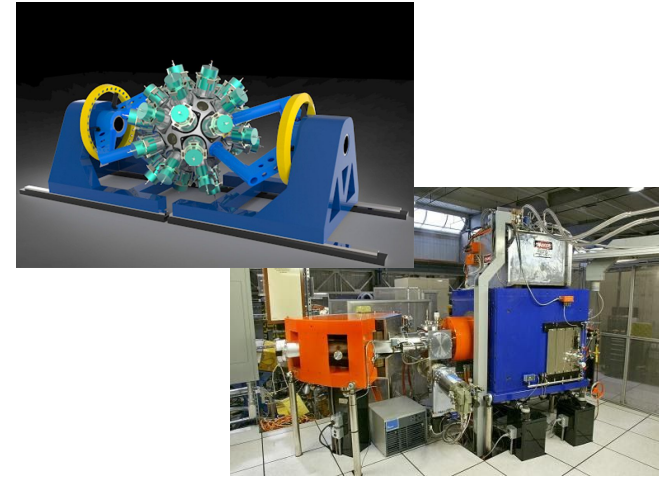
- **Xin-Nian Wang** and collaborators have published new insights on how to use the spin alignment of vector mesons in heavy-ion collisions as a barometer for fluctuation of strong force fields.  
Xin-Li Sheng et al., [PRL 131, 042304 \(2023\)](#)
- [DOE Science Highlight \(July 2023\)](#): The MAJORANA Demonstrator experiment published its final results on limits for the neutrinoless double beta decay of  $^{76}\text{Ge}$ . Berkeley Lab team led by **Alan Poon**.  
I. J. Arnquist et al. (Majorana Collaboration), [PRL 130, 062501 \(2023\)](#)
- [DOE Science Highlight \(August 2023\)](#): Lattice QCD results by **Andrè Walker-Loud** and collaborators predict a stronger neutrino-nucleon interaction than previously predicted, providing important insights on neutrino oscillation signals for DUNE.  
A.S. Meyer et al., [Ann. Rev. Nucl. Part. Sci. 72, 205-232 \(2022\)](#)
- [DOE Science Highlight \(August 2023\)](#): STAR collaboration with leading contributions by **Xin Dong**, reported the first observations of the flow patterns of hypernuclei in heavy ion collisions.  
B.E. Aboona et al. (STAR Collaboration), [PRL 130, 212301 \(2023\)](#)



# Funding & Awards

- **2022 Outstanding Mentor Bjoern Lehnert**
  - awarded by Berkeley Lab Workforce Development & Education.
- **New DOE funding for AI/ML projects**
  - ML approaches to automate online optimization and tuning of GRETA and VENUS (H. Crawford et al.)
  - Novel ML-based methods for Bayesian Inference and Uncertainty Quantification (P. Jacobs et al.)

*Congratulations!*







# National Postdoc Appreciation Week 2023

SEPT 18-22



**MONDAY, 9/18**

**9:30AM** – KICK OFF BREAKFAST ON MAIN HILL (B59-3101)

**10:30 AM** – HANGING THE NPAW BANNER (BUILDING 65)

**12:00 PM** – KICK OFF LUNCH @ EMERY STATION EAST (EMERYVILLE)



**TUESDAY, 9/19**

**12:00 PM** – POSTDOC PIZZA PARTY (50C PATIO)



**WEDNESDAY, 9/20**

**2:00 PM** – VOLUNTEER APPRECIATION EVENT (BUILDING 50 AUDITORIUM)

**THURSDAY, 9/21**

**3:00 PM** – 6TH ANNUAL RESEARCH SLAM (50 AUDITORIUM)

**4:45 PM** – SLAM/NPAW RECEPTION (IGB 310/PATIO)



\*FOR MORE INFORMATION, PLEASE VISIT  
[POSTDOCRESOURCES.LBL.GOV](http://POSTDOCRESOURCES.LBL.GOV)



# Berkeley Lab Research SLAM

for Early Career Scientists and  
Postdocs



See the [Berkeley Lab SLAM finalists](#) go head-to-head on Thursday, September 21st! A panel of esteemed judges will determine the 1st, 2nd, and 3rd place prize winners, and the live audience will select the winner of the People's Choice Award. The top 3 finalists will advance to the regional [Bay Area Research SLAM](#) to compete against the finalists from Lawrence Livermore National Lab, Sandia National Labs, and SLAC National Lab. There will be a special reception following the live event at the IGB Patio (Building 91-3rd floor).

**Location:** 50 Auditorium

**Time:** 3:00 PM - 4:45 PM

Also live-streamed at [streaming.lbl.gov](https://streaming.lbl.gov).

P.H.Y.S.I.C.A.L  
SCIENCES

Save to your calendar:  
Thursday,  
September 21  
@ 3:00PM!



Berkeley Lab Research  
**SLAM**

for Early Career Scientists and Postdocs



# In-person Division Retreat November 14 & 15, 2023

- Double-Tree by Hilton Hotel, Berkeley Marina

- Day 1: 9:00 am - 4:30 pm  
Focus: Strategic Planning

5:00 pm to 7:00 pm: Social Event

- Day 2: 9:00 am - 4:30 pm  
Focus: People Stewardship - IDEA, Career Development, Ways We Work

- Shuttle Service in morning and afternoon
- Registration starting in the next week

All Division staff and staff matrixed to the Division are expected to attend the retreat unless attendance would disrupt, planned travel, critical business or essential operations



# Fiscal Year End

- We are closing in rapidly on the end of the Fiscal Year
- Please look out for any questions or requests from your RAs on any financial matters. The RAs will work on Saturday, 9/23 and may have last minute questions. So, please be vigilant and responsive throughout this week.
- Please hold off with any non-urgent request to the Finance Team until after the end of the fiscal year
- In case of a Federal Government shutdown, we expect initially to continue business as usual (utilizing carry forward funds) and will keep everyone informed of the evolving situation.