N3AS Annual Meeting 2026

UC Berkeley, August 17-19

(note: all sessions are open to all)

Monday, August 17

4:00-5:00pm **Business Meeting** ***Campbell Hall 121***

Introduction

Wick Haxton: Status report

9/26-8/27 bridge proposal, NSF process, outcome, operating plan

6-year renewal proposal: Timing, structure, steps we can take now

Hiring preparations

Visa and related issues

Discretionary fund needs

Recent and upcoming activities

Undergraduate programs

Ken McElvain: Undergraduate Research, Berkeley

Sanjay Reddy: Undergraduate Research, UW

Dan Kasen: ULAB

Raul Briceno: REYES

Schools, Workshops, Partnerships

Yong Zhong Qian: 2026 Santa Cruz summer school

Yong Zhong Qian: N3AS/RIKEN/INT workshop on nucleosynthesis

Wick Haxton: RIKEN iTHEMS/ASPIRE

Discussion

5:00-5:30pm **Faculty Discussion** ***Campbell Hall 131***

6:00pm **Dinner (self organized)**

Tuesday, August 18

8:30- 9:00am Coffee and pastries ***Campbell Hall 131***

9:00-9:10 am Introductions

9:10-10:30am Science Session I - Chair: Christian Drischler

9:10am *Tianqi Zhao (N3AS Fellow)*
"Neutron Star EOS with Variational Encoder"

9:30am *Mia Kumamoto (N3AS Fellow)*
"Effects of Chiral Four-Body Forces in Dense Matter"

9:50am *Aviral Prakash (N3AS Fellow)*
"Multiphase hydrodynamics of strongly Interacting Matter: Composition-Driven Phase Change"

10:10am *Yuuka Kanakubo (RIKEN Berkeley Fellow)*
"Linear Response from hydrodynamics and kinetic theory in relativistic heavy-ion collisions"

Tuesday Aug 18, continued

10:30-11:00am **Coffee break**

11:00-12:20 pm Science Session II - Chair: David Radice

11:00am *Akira Dohi (RIKEN-Berkeley Fellow)*
"NS 1987A: A New Probe of Crustal Superfluidity with Lynx"

11:20am *Anna Suliga (former N3AS Fellow)*
"Binary Neutron Stars as Cosmic Ray Sources"

11:40am *Amira Aoyama (RIKEN visitor)*
"An Observational Discrepancy in the Fuel Budget of Superbursters"

12:00pm *Ian Padilla Gay (N3AS Fellow)*
"Solar System Abundances of p-Nuclides Probe Collective Neutrino Oscillations in Supernovae"

12:20--1:40pm **Lunch** ***Campbell Hall Patio***

1:40-3:00pm Science Session III - Chair: Yong Zhong Qian

1:40pm *Evan Rule (former N3AS Fellow)*
"Nuclear Reactions on a Quantum Computer"

2:00pm *Anupam Ray (former N3AS Fellow)*
"Axions from Stellar Nuclear Transitions"

2:20pm *Ish Gupta (N3AS Fellow)*
"Distinguishing Kilonovae for BNS and NSBH mergers"

2:40pm *Tianshu Wang (N3AS Associate Fellow)*
"Exploring the Effects of Rotation and Magnetic Fields in CCSN Explosions Using Fornax"

3:00-3:30pm **Coffee break**

3:30-5:10pm Science Session IV - Chair: Susan Gardner

3:30pm *Gabriele Di Ubaldo (RIKEN-Berkeley Fellow)*
"Axions from a Quantum Gravity Perspective"

3:50pm *Vincent Lee (N3AS Fellow)*
"Warped Dark Dimension"

4:10pm *Erwin Tanin (incoming N3AS Fellow)*
"Gradient-Produced Neutrinos"

4:30pm *Shoto Aoki (RIKEN Berkeley Fellow)*
"Exact SL(2,Z)-Structure of Lattice Maxwell Theory with θ-term in Modified Villain Formulation"

4:50pm *Jan Schütte-Engel (former RIKEN-Berkeley Fellow)*
"The Low-Frequency Bremsstrahlung/Memory Tail of Gravitational Radiation"

5:30-7:30pm **Reception and Dinner at the Faculty Club**

Wednesday, August 19

8:30-9:00am Coffee and pastries ***Campbell Hall 131***

9:00-10:20am Science Session V - Chair: Gail McLaughlin

9:00am *Rossella Gamba (N3AS Fellow)*
"Parameterized Tests of GR with Gravitational Waves"

9:20am *Kelsey Lund (N3AS Fellow)*
"r-Process Nucleosynthesis in Neutron Star Merger Disks"

9:40am *Mengke Li (N3AS Fellow)*
"Shaping the 3rd r-Process Peak: The Role of Nuclear Properties around the N= 126 Shell Closure"

10:00am *Divya Singh (N3AS Fellow)*
"Search for Sub-Solar-Mass Compact Objects in Data from LIGO-Virgo-KAGRA's Fourth Observing Run"

10:20-10:50am **Coffee break**

10:50-11:50pm Open discussion on selected topics -Moderator: Wick Haxton

11:30 am **Boxed lunch and informal group discussions** ***Campbell Hall Patio***

12:00 -1:00pm Postdocs Professional Development Meeting, UC policies
(Wick Haxton, Sanjay Reddy, Ken McElvain)

1:00pm Adjourn