



Stony Brook
Physics and Astronomy
Graduate Awards

May 5, 2026

PhD Graduates

Summer 2025

Gleb Aminov (*Komargodski & Rocek*)

Dimitrios Athanasakos (*Meade & Ringer*)

Vassu Doomra (*Deshpande & Drees*)

Matthew Forslund (*Meade*)

Artemis Sofia Giannakopoulou (*Meade*)

Andrei Grekov (*Nekrasov*)

Waltraut Knop (*Rastelli*)

Xiaoyu Yang (*La Camera*)

Fall 2025

Yue Chen (*Shrock*)

Mo Jia (*Wilking*)

Rian Koots (*Pérez-Ríos*)

Jonathan Lee (*Vafaei-Najafabadi*)

Jeremy Lee-Hand (*Dreyer*)

Samuel McClung (*Weinacht*)

Changcheng Zhang (*Bowen & Balazsi*)

PhD Graduates (continued)

Spring 2025

Nikhil Bachhawat (*Litvinenko*)

Brendan Boyd (*Calder*)

Wenhan Guo (*Wei*)

Shanjia Liu (*Tsybychev*)

Wei-Yang Liu (*Zahed*)

Soumendra Kishore Roy (*Farr*)

Yaman Sanghavi (*Shao & Sterman*)

Helena van Nieuwenhuizen
(*Mujica-Parodi*)

Hongye Yu (*Wei*)

Siwei Zhong (*Komargodski*)

Summer 2025 (applied for)

Duncan Adams (*Essig*)

Rocco Amorosso (*Syritsyn*)

Saajid Chowdhury (*Pérez-Ríos*)

Anirudh Deb (*Rastelli*)

Grace Kim (*Vafaei-Najafabadi*)

Anthony Mannino (*Fernandez-
Serra*)

Aswin Parayil Mana (*Wei*)

Sabina Sagynbayeva (*Armitage*)

Ruiren Shi (*Pérez-Ríos*)

“Rad” Srinivasan (*von der Linden*)

Xuan Zhang (*Vafaei-Najafabadi*)

Masters Graduates

Summer 2025

Mohsen Gheisarieha

Fall 2025

Boyang Sun

Gage Tustin

Yu Wang

Spring 2026

Xavier Braun

Yuze Chen

Abhishek Cherath

Kyle Conway

Zhiquan Lao

Ian Segal-Gould

Graham Speedie

Summer 2026

Aditya Agarwal

Bela Arwen

Ishan Varma

Lisa Chan

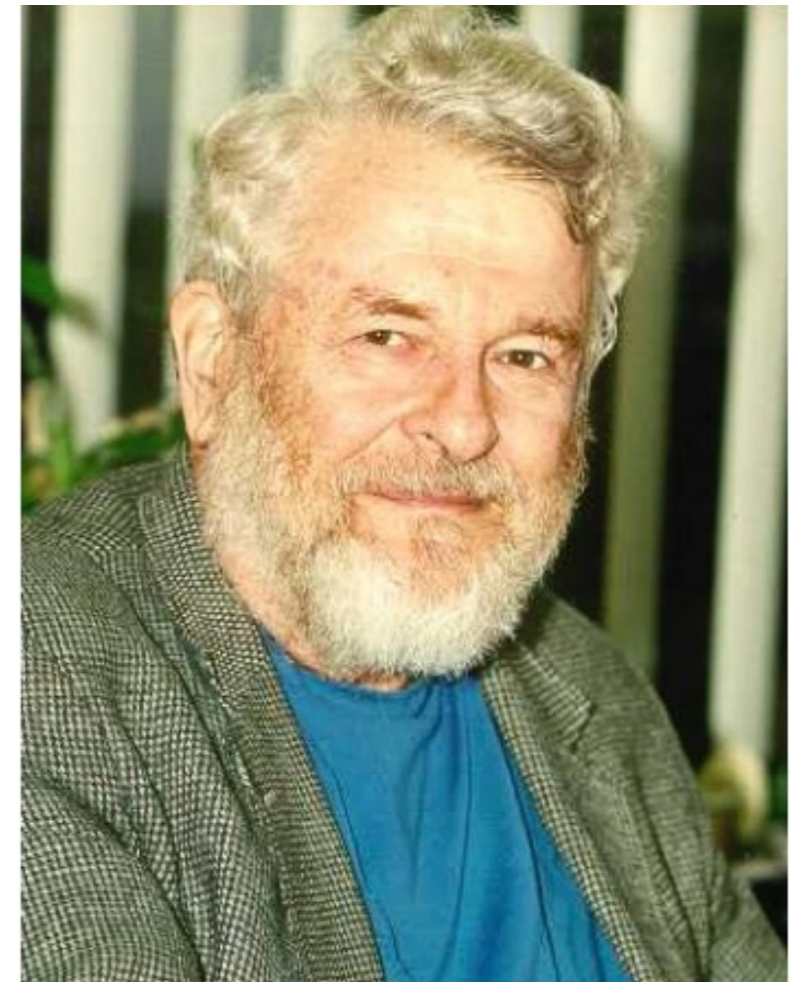
Graduate Teaching and the David Fox Prize

Professor David Fox received his B.A. in Mathematics and his M.A. and Ph.D. in Physics from Berkley.

In 1959, he moved to the newly created Physics Department known as the SUNY College on Long Island, located in Oyster Bay. In 1962, the college moved to Stony Brook and became a university.

David was active in the development of the graduate program. He served as Dean of the Graduate School from 1963 to 1966. He was the Graduate Program Director of Physics for many years.

The “David Fox Prize” was established to honor his many years of exceptional service and is awarded to outstanding Teaching Assistants.



David Fox Prize Winner

Rodrigo Cádiz Carvajal:

“Rodrigo has been the TA for PHY 308 (Quantum Mechanics) for 4 semesters. He took the initiative to make all the homework solutions available and sometimes also formatted the lecture notes given in class. Rodrigo’s character is friendly, so many undergraduate students find him approachable and his office hours are well attended.”

Masters of Teaching Award



Clifford E. Swartz, a founding member of the physics department faculty at Stony Brook and editor of *The Physics Teacher* for almost 30 years.

In 1987, he was awarded the Oersted Medal of the American Association of Physics Teachers which recognizes “those who have had an outstanding, widespread, and lasting impact on the teaching of physics.”

Cliff E. Swartz Prize for MAT students preparing for a career
in teaching High School

William “Ben” Alster

Academic Awards and the T. Alexander Pond Prize

Professor T. Alexander Pond pursued his undergraduate and graduate education at Princeton from 1947 through 1953. He came to Stony Brook as Chairman of the Physics Department in 1962.

As chairman from 1962-1968 he established all aspects of the present departmental configuration, transforming us from a small group with aspirations to a program with an international reputation. Later he served in a variety of university leadership capacities including Executive Vice-President and Acting President.

He had a deep commitment to excellence in graduate education. The T. Alexander Pond Prize was established and is awarded to students who have outstanding scores on the Comprehensive Exam:



Feng Liu

Academic Awards and the Henry B. Silsbee Prize

Henry B. Silsbee came to Stony Brook in 1964. He was an outstanding physicist and educator, and enjoyed a 31 year career, becoming Professor Emeritus upon his retirement in 1995. Hank used high precision atomic beam resonance techniques in his research program at BNL.



He recognized the potential for Stony Brook to be a national leader in physics and used his energy to advance AMO physics at Stony Brook.

For many years Hank managed the department's graduate admissions. His efforts and attention to detail had a significant impact on the educational and research program that exists today.

This prize is for a second year student who has excelled on the courses, comps and early research:

Yang Yang Li and Daniel Julian

Lourie Summer Research Fellowships

This is the seventh year we will be supporting students through the Lourie Summer Research Fellowships funded by a generous endowment from Robert Lourie.



These funds are designed to facilitate connecting excellent students and potential advisors during their first two years in the PhD program.

Yitianran Wang (Kumar)
Ian Johnson (Perna)
Amanda Lee (Koda)
Haocheng Zhang (Zahed)
Shangke Zhou (Tsybychev)
Abigail Swanson (Schneble)
Joshua Martin (Calder)

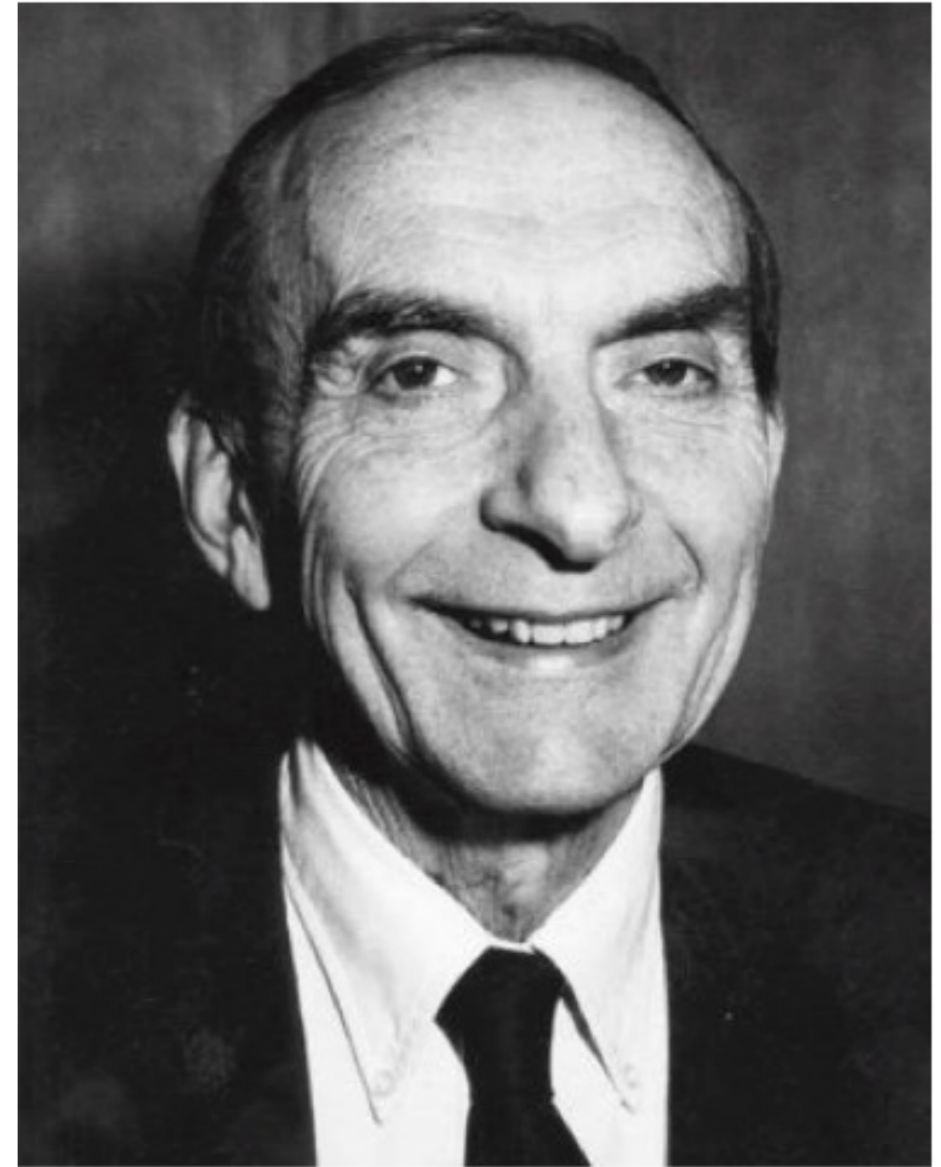
Research and Travel Prizes

The following awards are given in recognition of outstanding research and can be used to support travel to conferences, workshops, or summer schools.

Gerald “Gerry” Brown Prize

Gerry Brown was born in South Dakota and received a PhD from Yale and the University of Birmingham. He was a very influential nuclear theorist and has shaped nuclear theory, in part because of the large number of students (~100!) he mentored. Many of them now do have faculty positions all over the world.

He created the nuclear theory group at Stony Brook and treated everyone in the group as his family. He had a great physical intuition and preferred simple arguments to elegant calculations (which he also admired). In the later years at Stony Brook he had been working on supernovae in collaboration with Hans Bethe.



Gerry Brown Prize Winners

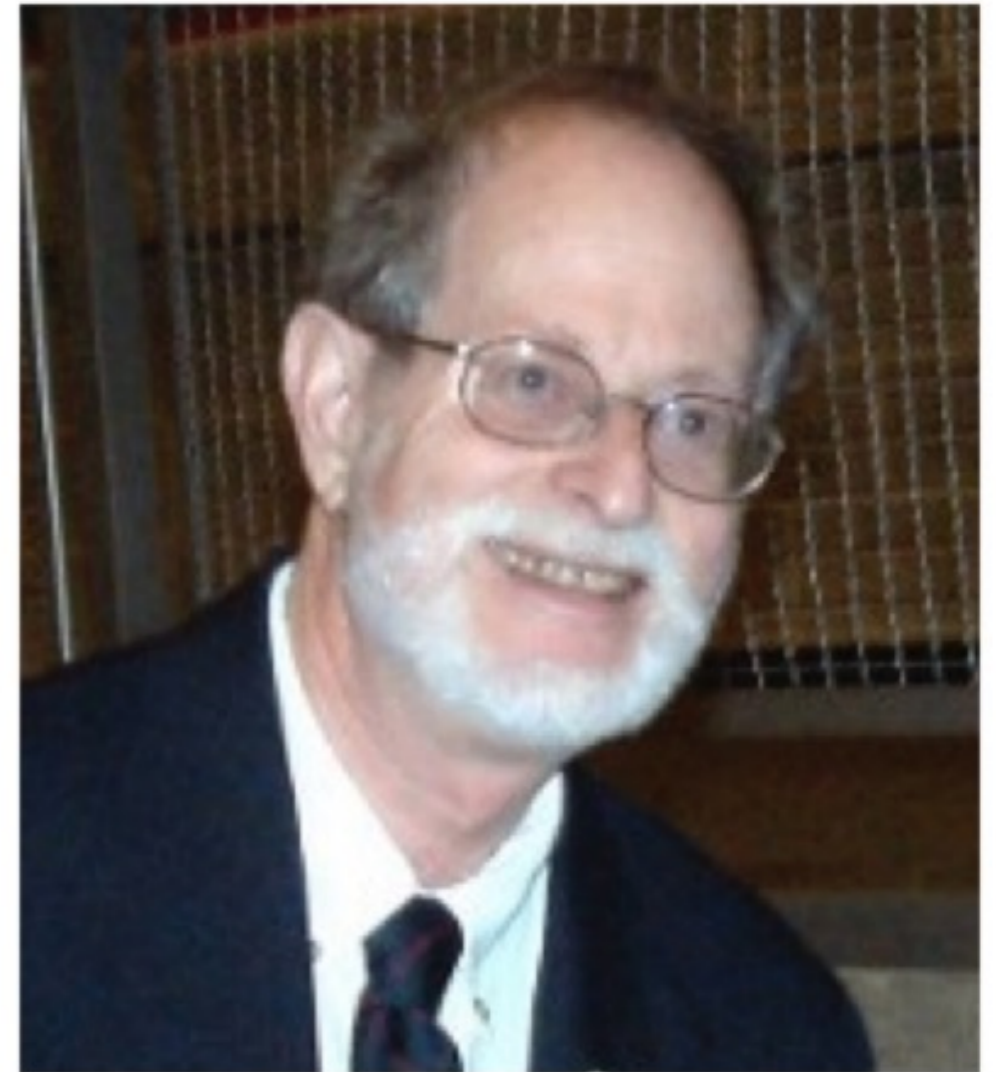
- **Benjamin Levine** (*von der Linden*) — Ben is studying systematic effects in weak gravitational lensing that will affect cosmological parameter extraction from the LSST survey. He has contributed to the analysis of early Rubin Observatory commissioning data and will present this work at the LSST Dark Energy Science Collaboration summer meeting.
- **Yikai Wu** (*Essig*) — Yikai is the analysis lead for SENSEI's search for sub-GeV dark matter at SNOLAB, using skipper CCDs to probe dark matter–electron scattering at the lowest accessible masses. He will present the latest SENSEI results at the APS Division of Particles and Fields meeting in July 2026.
- **Boyang Sun** (*Lattimer*) — Boyang has used causality and thermodynamic consistency to constrain the neutron star equation of state, with two published and two submitted papers. He will present this work at the INT workshop on Finite-Temperature Effects in Multi-Messenger Astrophysics in Seattle.

Gerry Brown Prize Winners

- **Zhongqi Liang** (*Peres-Rios*) — Zhongqi has published several papers on few-body quantum systems and ion-atom interactions in ultra-cold atom-ion hybrid traps. He will present this work at International Conference of Atomic Physics (ICAP) 2026 in Wuhan.
- **Neal Anderson** (*Piacquadio*) — Neal has measured the b-tagging efficiency for light-jets in ATLAS Run-3 data, a key calibration for heavy-flavor identification in LHC analyses. He will present these results at the ATLAS/CMS Flavor Tagging Workshop in Florence in July 2026.
- **Zheyang Chen** (*Kiryluk*) — Using 13 years of IceCube cascade data, Zheyang identified six high-energy tau-neutrino candidates with ~ 2 m resolution on the τ decay length for 30 TeV neutrinos. His results, to be presented at ISVHECRI 2026 on behalf of the IceCube collaboration, strengthen constraints on the astrophysical tau neutrino flux and its production mechanisms.

Peter B. Kahn Prize

Peter Kahn's research was in random matrices and non-linear dynamics. During his tenure at Stony Brook, Peter was devoted to the good of the Department. Like his advisor, Max Dresden, he was an excellent teacher and was loved by his colleagues. The Peter B. Kahn Award was established in his name. The Math-Physics library was named after him.



Peter B. Kahn Award Winner

Melissa Rasmussen (Zingale)

Melissa will attend the 2026 CeNAM Frontiers in Nuclear Astrophysics Meeting at Texas A&M, where she will present her research on modeling convective burning in massive stars in the lead-up to core-collapse supernovae

Beyond her research, Melissa is an engaged member of the graduate community. She serves actively in the PGSA and on the Quality of Life Committee, and has helped bring about meaningful improvements, including the math Boot Camp for incoming students, which was warmly received by the first-year class.

Jonathan Kaufman Prize

Jonathan was an exemplary graduate student of outgoing and friendly demeanor who died tragically of cancer in February, 2009. The fund was established in his memory by his friends and family. Since Jonathan was an experimentalist, nominations of students doing experimental research will be favored.



Alex Heindel (CKJ) — Alex has contributed broadly to Stony Brook's DUNE program, with work spanning Power over Fiber R&D, hardware integration testing at CERN, and data analysis resulting in a JINST publication.

Chuihang Liu (Zhu) — Chuhang Liu's work at BNL has produced a 13 papers and a new result in ultrafast magnetism — the first observation of magnon dynamics using electron microscopy.

Chase Wallace (Figueroa) — Chase helped to build Stony Brook's quantum network, designing the control systems that have enabled the distribution of quantum entanglement across hundreds of kilometers.

The Rod Engelmann Prize

Rod Engelmann got his PhD degree from the University of Heidelberg in 1966 and joined the faculty in Stony Brook in 1973. During his career he worked on experimental particle physics at CERN and at Fermilab. He was advisor to nine graduate students, and this award has been made possible because of a generous donation by one of them. He was very interested in education and pioneered on-line learning long before anyone else. He died in 2014.



Wenhao Ya (Dao) — Wenhao is contributing to the ATLAS measurement of associated Higgs-Vector boson production, with a focus on developing the statistical framework needed to extract the rare gluon-fusion-induced ZH signal from Run 3 data.

Kuunal Mahtani (Jung) — Kuunal is working on the Super-Fine-Grained-Detector (SFGD) for the T2K experiment, contributing calibration improvements, Monte Carlo simulation upgrades, and hands-on hardware that have advanced the event-by-event reconstruction of neutron kinetic energy in neutrino interactions.

Lee and Kang Endowed Memorial Scholarship

Benjamin Lee



Joo Sang Kang



Benjamin Whisoh Lee was a professor at Stony Brook whose work in theoretical particle physics (done at Stony Brook) exerted great influence on the development of the Standard Model, especially on the renormalization of the electro-weak model and gauge theory.

Joo Sang Kang was Ben Lee's doctoral student at Stony Brook in 1972, who subsequently played an important role in developing particle physics in South Korea.

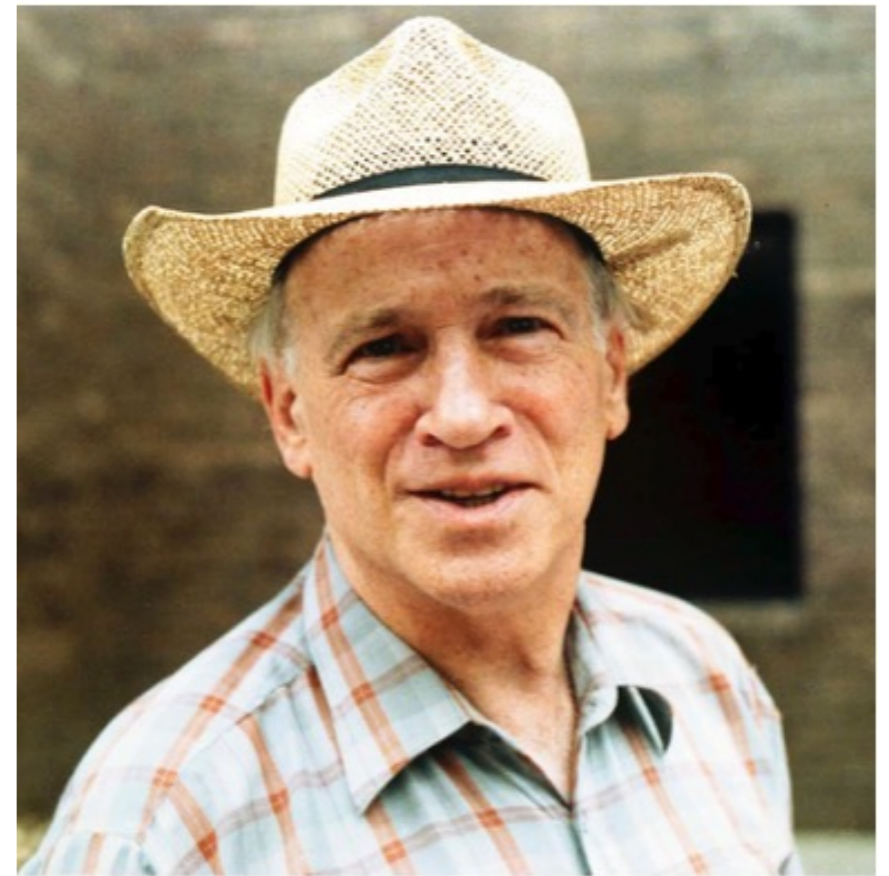
Hyunjun Park is awarded the Lee and Kang Scholarship

Dresden Prize for a Theoretical Thesis

Max Dresden came to Stony Brook in 1964, full of vigor and imbuing us with the spirit required to bring our dreams of becoming a major physics department one step closer to reality.

Max brought a strong group of students with him from Iowa, so that our nascent graduate program had substance. Max was a charismatic lecturer and thesis supervisor. During his twenty-five years at Stony Brook he supervised 43 Ph.D. theses and was a wonderful person with whom to share ideas.

The Max Dresden Theoretical Physics Thesis Prize was established in remembrance of Max and as recognition of his extraordinary contribution to the University and our Department.



Dresden Prize for a Theoretical Thesis

Siwei Zhong
advised by Zohar Komargodski

Siwei's PhD was marked by exceptional breadth and productivity, spanning a wide range of theoretical topics across seven published papers.

Siwei resolved the quantum baryon junction problem — work that prompted a numerical verification through lattice gauge simulations. He also produced important papers on twist defects in quantum field theory, making substantive contact with generalized (non-invertible) symmetries.

Siwei further extended his reach into the physics of cold gases, establishing a framework for conformal defects in Schrödinger field theories and their correspondence to many-body states in a harmonic trap, with applications to Unitary Fermi Gasses.

Siwei will begin a postdoctoral position at the University of Chicago this Fall.

“The reward for good physics,
is the opportunity to do more good physics....”

Congratulations to all award winners again!