Ken Ono

Selected Leadership

- Axiom Math, Founding Mathematician (12/25-present).
- U. Virginia, STEM Advisor to the Provost (10/22-1/26).
  Lead (with the Provost) an ongoing process of systemic transformation of the educational, operational, financial, and community engagement of STEM fields.
- Mathematical Sciences Education Board of the US National Academies (3/25-present)
  Provide guidance at the national level in the mathematical sciences in research and education.
- Institute for Advanced Study, Board of Trustees of AMIAS, Vice President ('23-present).
  Lead initiatives with the board president to support IAS's research mission.
- National Security Agency Advisory Board ('22-'25).
  Advise the Director on computational and mathematical issues to support the agency's mission of analyzing, collecting, and processing information to protect the United States.
- Amer. Assoc. for the Advancement of Science, Council ('23-'24) & Chair of Math ('20-'23).
  Led (with the president) the mission of advancing STEM fields in service to society.
- U. Virginia, Chair of Department of Mathematics (8/21-1/23).
  Provided leadership and vision for the department to enhance its quality and reputation.
- American Mathematical Society, Vice President ('18-'21).
  Led (with the president) efforts to support the mathematical sciences in service to society.
- U.S. National Committee for Mathematics (NAS), Member ('10-'22).
  Ten member committee promoting international cooperation in the math with the IMU.

Selected Public Engagement

- Host of the podcast *HOOS in STEM*, '22-'25.
  Showcasing the cornucopia of STEM innovations at UVA.
- Sports Science (advisor of multiple Olympic and world champion swimmers), '16-present.
  Selected media: ESPN, Nature, NBC Olympics, NPR, & NY Times.
- Spirit of Ramanujan Global STEM Talent Search, Organizer, 2016-present.
- Nat Geo TV Program *Star Talk* hosted by Neil deGrasse Tyson, 2017.
- *Eureka* TV Program (30 minute special), 2017.
- Interviews: The Takeaway ('16), Science Friday ('16), Inquiry ('16), Radio IQ ('22), With Good Reason ('24), Freakonomics Radio Network ('24), All Things Considered ('25).
- NSF Matters (with Dir. F. Cordova) for Presidential Transition, White House, 2016.
- Assoc. Producer of *The Man Who Knew Infinity* starring J. Irons and D. Patel ('14).
- Cast, *The Genius of Srinivasa Ramanujan*, Docudrama by N. Kudhyadi Films, 2013.
- AMS "*Who wants to be a mathematician*", Program Advisor, '04-'20.
  Sponsor and consultant for a math game for high school students in North America.

Education

- UCLA, Ph.D. Mathematics (1993), M.A. Mathematics (1992).
- University of Chicago, B. A. Mathematics (1989).

Selected Employment

- Axiom Math, Founding Mathematician ('25-present).
- U. Virginia, Marvin Rosenblum Professor of Mathematics ('22-present),
  Thomas Jefferson Professor of Mathematics ('19-'22)
  Secondary Roles: Prof of Data Science by Courtesy ('23-present), Prof Affiliate of Statistics ('23-present), Prof of Electrical and Computer Engineering by Courtesy ('25-present).
- Adjunct Staff Member, Institute for Defense Analyses ('25-present).
- Epoch AI, Freelance Mathematician ('24-'26).
- Emory University, Asa Griggs Candler Professor of Mathematics ('10-'20).
- UW Madison, Associate Professor ('99-'01), Professor ('01-'03), Solle & Margaret Manasse Professor of Science ('03-'11), Hilldale Professor of Mathematics ('08-'11).
- Penn State, Assistant Prof. ('97-'99), Martarano Prof. of Mathematics ('99-'00).
- Institute for Advanced Study, Member ('95-'97).

Selected Honors

- Fellow of the Asia-Pacific Artificial Intelligence Association (AAIA), 2025.
- Honorary Member of Phi Beta Kappa at University of Virginia, 2025.
- Honorary Fellow of the Romanian Academy of Sciences, 2025.
- National Academy of Sciences Cozzarelli Prize ("PNAS Paper of the Year" Runner Up), 2024
- Honorary Member of Phi Beta Kappa at University of Chicago, 2024.
- Honorary Fellow of the Indian Academy of Sciences, 2024.
- Fellow of the Asian American Scholars Forum, 2023.
- Effie Silver Award (Miller 64 Super Bowl ad), 2023.
- University of Chicago Alumni Award for Professional Achievement, 2023.
- Phi Beta Kappa Distinguished Scholar, 2020-22.
- Rhodes Trust Inspirational Educator Award, 2019.
- Prose Award (Best Scholarly Mathematics Book), Assoc. of American Publishers 2018.
- Fellow of the American Mathematical Society, 2012.
- NSF Director's Distinguished Teaching Scholar Award, 2005.
- Guggenheim Fellowship, 2003.
- PECASE Award from President Clinton, 2000.
- David and Lucile Packard Fellowship, 1999.
- Alfred P. Sloan Foundation Research Fellowship, 1999.
- NSF CAREER Award, 1999.
- NSA Young Investigator, 1997.

Selected Current Editorial

- Annals of Combinatorics, Editor.
- Communications in Number Theory and Physics, Editor.
- Hardy-Ramanujan Journal, Editor.
- Mathematical Intelligencer, Board of Correspondents.
- Ramanujan Journal, Editor-in-Chief.
- Research in the Mathematical Sciences, Editor-in-Chief.
- Research in Number Theory, Editor-in-Chief.

Selected Service

- WTJU 91.1 FM Radio, Member of the Advisory Board ('23-'25).
- Asian American Scholar Forum, Member ('23-present).
- Phi Beta Kappa, Visiting Scholar Committee ('22-present).
- Advisory Board, Center for Advanced Mathematical Sciences, Lebanon ('21-present).
- UVA: Co-Director with Deans Acampora and Bourne of UVA Futures Initiative ('22-present).
- Technical Consultant, UVa Swimming ('19-present) and USA Swimming ('16-present).
- American Mathematical Society: Dozens of committee assignments since '05.
- Advisory Board, Conference Board of the Mathematical Sciences ('18-'23).
- U.S. Delegate, International Mathematical Union General Assembly, 2018 ICM.
- Infinity Arts Foundation, Board Member ('16-present).
- SASTRA Ramanujan Prize Committee ('10-'12; '21-'22).
- U.S. National Committee for Mathematics (NAS) ('10-'22).
- AMS Mathematics Research Communities Advisory Board ('09-'12).
- Banff International Research Station, Scientific Advisory Board ('09-'12).
- Davidson Institute for Talent Development, Mathematics Advisor ('07-present).
- Smithsonian Institution, Science and Technology Advisory Board ('05-'07).

Selected Invited Lectures

- SIAM Annual Meeting, Plenary Lecture (2026).
- Mathematical Association of America Distinguished Lecture (2022, 2016).
- Phi Beta Kappa Distinguished Lecturer (6 campus lecture tour), 2021.
- Mathematical Frontiers (with Terry Tao), US National Academy of Sciences, 2018.
- Simons Foundation Presidential Lecture, 2018.
- AMS Arnold Ross Lecture, 2017.
- AMS-NZMS Maclaurin Lectureship, 2017.
- Phi Beta Kappa "Cities of Distinction", Atlanta, 2017.
- NSF "Big Ideas" Distinguished Lecture, 2017.
- NSF Matters (with Dir. F. Cordova) for Presidential Transition, White House, 2016.
- 2016-2017 Mathematical Association of America George Polya Lecture Series.
- 2015 International Mathematical Olympiad, Chiang Mai, Thailand, Plenary Address.
- Mathematical Association of America Plenary Address, 2015 Joint Mathematics Meeting.
- Convocation Address, Emory University, 2014.
- American Mathematical Society's Erdös Memorial Lecture, 2012.
- Deutsche Mathematiker-Vereinigung Invited Address, 2011 national meeting.
- American Mathematical Society Invited Address, 2009 Joint Mathematics Meeting.
- Harvard-MIT Current Developments in Mathematics Lecture Series, 2008.
- NSF/CBMS Conference Distinguished Lecturer, 2003.
- American Mathematical Society, Invited Address, 2001 Spring Sectional Meeting.

Selected Publications
(240+ papers)

1. K. Ono and K. Soundararajan, *Inventiones Mathematicae* **130** (1997), 415-454.
2. K. Ono and C. Skinner, *Annals of Mathematics* **147** (1998), 453-470.
3. K. Ono and C. Skinner, *Inventiones Mathematicae* **134** (1998), 651-660.
4. W. Kohnen and K. Ono, *Inventiones Mathematicae* **135** (1999), 387-398.
5. K. Ono, *Annals of Mathematics* **151** (2000), 293-307.
6. K. Bringmann and K. Ono, *Inventiones Mathematicae* **165** (2006), 243-266.
7. K. Bringmann, K. Ono, and R. Rhoades, *J. American Math. Soc.* **21** (2008), 1085-1104.
8. K. Bringmann and K. Ono, *Annals of Mathematics*, **171** (2010), 419-449.
9. J. Bruinier and K. Ono, *Annals of Mathematics*, **172** (2010), 2135-2181.
10. K. Ono, *PNAS*, **108** (2011), 473-476.
11. M. Griffin, K. Ono and L. Rolen, *PNAS*, **110** (2013), 5765-5768. **165** (2016), 1475-1527.
12. S. Jin, K. Ono, W. Ma, and K. Soundararajan, *PNAS*, **113** (2016), 2603-2608.
13. J. Duncan, M. Mertens, and K. Ono, *Nature*, Ser. Communications, **8** (2017), Art. 670.
14. M. Griffin, K. Ono, L. Rolen, and D. Zagier, *PNAS*, **116** (2019), 11103-11110.
15. W. Craig, K. Ono, J.-W. van Ittersum, *PNAS*, **121** no. 39 (2024), e2409417121.

Books

1. K. Ono, *The web of modularity: Arithmetic of the coefficients of modular forms and q-series,* NSF-CBMS Conference Monograph, American Mathematical Society, 2004.
2. A. D. Aczel and K. Ono, *My search for Ramanujan* (Memoir), Springer, New York, 2016.
3. K. Bringmann, A. Folsom, K. Ono, and L. Rolen, *Harmonic Maass forms and mock modular forms: theory and applications*, American Mathematical Society, 2017.

Research Grants (non-conference)

- Simons Foundation: \$42,000 (2025-2030).
- Continuous NSF research support since 1995.
- NSF Standard Grants:
  \$275,975 ('21-'26); \$355,000 ('16-'20); \$303,000 ('16-'19); \$324,000 ('13-'16);
  \$285,000 ('10-'16); \$237,000 ('09-'11), \$225,000 ('07-'10).
- NSF REU: \$415,976 ('22-'26); \$292,300 ('20-'22); \$360,628 ('19-'22); \$288,128 ('16-'19);
  \$324,000 ('13-'16); \$237,709 ('09-'11).
- NSA REU: \$125,000 ('23), \$125,000 ('22), \$80,437 ('21), \$80,000 ('20), \$70,000 ('19).
- Templeton World Charity Foundation: \$550,000 ('18-'23); \$100,000 ('16-'18).
- NSF Research and Training Grant (RTG): \$1.3 million ('09-'14).
- NSF Director's Distinguished Teaching Scholar Award: \$305,000 ('05-'10).
- NSF Focused Research Grant (FRG): \$333,000 ('04-'07).
- NSF Vertical Integration of Research and Education (VIGRE): \$2.5 million ('04-'09).
- NSF Grant: \$71,991 (2003).
- Guggenheim Fellowship: \$75,000 (2003).
- Romnes Fellowship, UW Madison: \$50,000 (2002).
- Number Theory Foundation Grant: \$51,000 ('00-'03).
- PECASE: \$500,000 ('00-'05).
- David and Lucile Packard Fellowship: \$625,000 ('99-'05).
- Sloan Fellowship: \$35,000 ('99-'01).
- NSF CAREER Award: \$200,000 ('98-'04).
- NSA Young Investigator Award: \$38,500 ('97-'99).
- NSF Postdoctoral Fellowship: \$75,000 ('95-'99).

Advising

- 34 Ph.D. Students. Postdocs assumed: MIT, Princeton (3), Stanford (5), Inst. Adv. Study, U. Bristol, UCLA, U. Cologne (4), U. Illinois (4), Max Planck, Vanderbilt (2), among others. Mahlburg's thesis paper was the '06 PNAS "Paper of the Year".
  Tenure & tenured positions assumed: BYU (2), Duke, LSU, Michigan Tech., Oregon State, St. Petersburg State, U. Florida, U. Georgia, U. Illinois (Urbana), U. South Carolina (2), U. Tenn. (Knoxville), Tulane, Tufts, US Naval Academy, Vanderbilt, U. Wisconsin (Madison), among others.
- 4 M.A. Students
- 17 Postdocs. Earned permanent faculty positions at Aachen U (Germany), Amherst, Ohio State, Texas A&M (2), TU Delft (Netherlands), U. Bonn, U. Illinois (Urbana), U. Liverpool (UK), U. Minnesota (Twin Cities), U. Paris (Jussieu), U. Pennsylvania, U. South Carolina, U. Cologne (2), Yale, among others. They have won AMS Dolciani Prize, Chateaubriand Fellowship, Fulbright Fellowship, Heisenberg Fellowship, Krupp \$1 million Euro Prize, NSF CAREER Award, the SASTRA Ramanujan Prize, Sloan Fellowship, among others.
- 300+ undergrads in REUs: 2 Breakthrough Mirzakhani New Frontiers Prizes, 10 Morgan Prizes, 9 Schafer Prizes, 2 Rhodes Scholars, dozens of NSF Grad Fellowships and many Goldwater Scholars. Mentees have assumed tenure track/tenured positions at Brown (2), Duke, Harvard, Notre Dame, Purdue, Stanford, UC Berkeley (2), UC San Diego, U. Michigan (2), U. Washington (2), Vanderbilt, to name a few.
- Dozens of HS students. ISEF (7 top 3 awards), Westinghouse STS (3rd in 1997), Intel STS (2nd in 2000, 4th in 2005, 6th in 2011, 4th in 2013), Regeneron STS (1st in 2021).