

Young-Kee Kim



Positions:

Albert A. Michelson Distinguished Service Professor, The University of Chicago (7/2024 – present)
Louis Block Distinguished Service Professor, The University of Chicago (1/2017 – 6/2024)
Louis Block Professor, The University of Chicago (1/2011 – 12/2016)
Professor of Physics, The University of Chicago (1/2003 – present)

Professor of Physics, University of California, Berkeley (7/2002 – 12/2002)
Associate Professor of Physics, University of California, Berkeley (7/2000 – 6/2002)
Assistant Professor of Physics, University of California, Berkeley (7/1996 – 6/2000)

Special Advisor to the Provost, The University of Chicago (7/2023 – 6/2024)
Senior Advisor to the Provost for Global Scientific Initiatives, The University of Chicago (7/2020 – 6/2023)
Chair, the Department of Physics, The University of Chicago (9/2016 – 7/2022)

Director Emeritus, Fermilab Accelerator National Laboratory (1/2026 – present)
Interim Director, Fermi Accelerator National Laboratory (1/2025 – 1/2026)
Deputy Director, Fermi Accelerator National Laboratory (7/2006 – 6/2013)

Principle Investigator, Kavli Institute for Physics and Mathematics of the Universe, U. of Tokyo (2017-2022)
Distinguished Visiting Scholar, Korea Advanced Institute of Science and Technology, Korea (2018 – 2021)

Honors and Awards since 1996 as a faculty member:

Elected Member, National Academy of Sciences (2022)
Elected Member, American Academy of Arts and Sciences (2017)
Elected Foreign Member, Korean Academy of Science and Technology (2022)
Fellow, American Association for the Advancement of Science (2011)
Fellow, American Physical Society (2004)
Fellow, Alfred P. Sloan (1997)

Ho-Am Prize (2005)

Honorary Degree, University of Rochester (2025)
Rochester Distinguished Scholar Medal (2010)
Top 20 Scientists Under 40, Discover Magazine (2000)

Korean American Pioneer Award (2023)
Korea University Alumni Award (2012)
Scientist of the Year Award, Korean American Scientists and Engineers Association and Korean Federation of Science and Technology Societies (2019)
Particle Physics Prize of the European Physical Society, awarded to CDF and D0 collaborations (2019)

Arthur L. Kelly Faculty Prize for Exceptional Service, Physical Sciences Division, University of Chicago (2022)
Leadership Award, Women in Science, Chicago Council of Science and Technology (2012)

Science Service Medal, South Korean Government (2008)

Education and Training:

B.S., Physics, Korea University, South Korea (2/1984)

M.S., Physics, Korea University, South Korea (2/1986)

Ph.D., Physics, University of Rochester, U.S.A. (9/1990)

Postdoctoral Fellow, Lawrence Berkeley National Laboratory (10/1990 – 6/1996)

Key Leadership Positions:

Co-Spokesperson of the CDF Experiment at the Tevatron (6/2004 – 5/2006)

- The Tevatron, a 2 TeV (Trillion electron Volt) proton-antiproton accelerator at Fermilab, was the highest energy collider until 2009 when the LHC at CERN started operations.
- CDF was one of the two particle physics experiments at the Tevatron, with ~600 collaborators from 14 countries. The collaboration published > 500 physics results. Major achievements include the discovery of the top quark (together with the Dzero collaboration), the precision measurements of the W boson and top quark masses, and the observation of the B_s - B_s bar oscillation.
- The collaboration was led by two elected scientific leaders (*co-spokespersons*) at a given time.

Interim Director of Fermi National Accelerator Laboratory (1/2025 – 1/2026)

Deputy Director of Fermi National Accelerator Laboratory (6/2006 – 6/2013)

- Fermilab is America's particle physics and accelerator laboratory.
- Since 1967, as the United States' premier particle physics laboratory, Fermilab works on the world's most advanced particle accelerators and digs down to the smallest building blocks of matter. It also probes the farthest reaches of the universe, seeking out the nature of dark matter and dark energy.
- Fermilab has ~2,000 employees and ~4,000 users and affiliates from > 50 countries. Fermilab's 6,800-acre site is in Batavia, Illinois, and managed by the Fermi Forward Discovery Group, LLC.

Chair, the Department of Physics, The University of Chicago (9/2016 – 7/2022)

President, The American Physical Society, APS (1/2024 – 12/2024)

- Founded in 1899, APS is a scientific membership organization committed to advancing physics and creating a welcoming professional home for the world's physics community. With ~50,000 members, APS is active in public and governmental affairs, publishes 17 science journals, and conducts extensive programs in education, public outreach and media relations. The APS is international: ~25% of its members live outside the U.S. (> 115 countries).
- During my tenure as President, APS refreshed its vision, mission, and core values, and developed a strategic framework to guide APS's work and help APS achieve its vision for the future. Another focus was to strengthen partnerships with international physics societies. For example, I hosted numerous summits with physics leaders from Europe, the Americas, the Asia-Pacific region, Africa, and the Middle East to discuss their challenges and to identify potential collaborations.

Chair, Division of Particles and Fields (DPF), the American Physical Society (1/2020 – 12/2020)

- DPF is one of the APS divisions for the particle physics community with ~ 3,000 members. During my tenure as Chair, DPF launched the most recent U.S. Particle Physics Community Planning Exercise (a.k.a. "Snowmass").

President, Association of Korean-American Scientists and Engineers Association (7/2022 – 6/2023)

- Founded in 1971, the Korean-American Scientists and Engineers Association (KSEA) is a leading Korean-American scientific, engineering, and industrial organization to promote the application of science and technology for the general welfare of society, foster international cooperation especially between the U.S. and Korea, and help Korean-American scientists and engineers develop their full career potential. KSEA has about 7,000 members.

Research Programs:

Experimental Particle Physics

- ATLAS experiment with the LHC proton-proton collider, CERN (2009 – present)
- CDF experiment with the Tevatron proton-antiproton collider, Fermilab (1990 – 2013)
- AMY experiment with the TRISTAN e^+e^- collider, KEK, Japan (1986 – 1991)

Accelerator Science

- Accelerator research, the University of Chicago (2013 – present)
- Center for Bright Beams, NSF Science and Technology Center (2016 – present)

Scientific Leadership Positions:

CDF Experiment at the Tevatron proton-antiproton collider, Fermilab
(Collaboration of ~600 particle physicists from ~20 countries)

- Co-Spokesperson (scientific leader) of CDF Experiment (2004 – 2006)
- Leader, Top Mass Analysis Group (2003 – 2004)
- Project Leader, Level-3 Trigger System (2002)
- Associate Head for Run II Detector Operations (2001)
- Associate Project Leader for Run II Upgrade (2000)
- Leader, Drift Chamber Group at LBNL/UC Berkeley (1996 – 1999)
- Co-Leader, Electroweak Physics Group (1995 – 1996)
- Leader, W Mass Analysis Group (1993 – 1999)

Fermi National Accelerator Laboratory

- Chief Research Officer (2006 – 2013)

ATLAS Experiment at the Large Hadron Collider, CERN

- PI, University of Chicago ATLAS Group (2013 – 2019)
- Publication Committee, approving all of ATLAS publications (2015 – 2018)
- Chair, Authorship Committee, approving all of new ATLAS authors (2017 – 2018)
- U.S. ATLAS Science Advisory Panel (2015 – 2017)
- Chair, U.S. ATLAS Phase-1 Upgrade Advisory Group (2014 – 2017)
- Chair, Institutional Board of Tracking Trigger Upgrade Project (2014 – 2017)

Accelerator Physics

- PI, University of Chicago Accelerator Science Group (2013 – present)
- Theme co-Leader, NSF Science & Technology Center “Center for Bright Beams” (2016 – present)

Academic Advisory Roles at the University of Chicago:

Faculty Steering Committee, Hong Kong Center (2023 – 2024)
Faculty Steering Committee, Beijing Center (2020 – 2023)
Faculty Steering Committee, Delhi Center (2012 – 2020)
Faculty Advisory Group for the partnership with African Inst. for Mathematical Sciences (2015 – 2024)
Advisory Council, Gray Center for Arts and Inquiry (2012 – present)
Faculty Advisory Council, Arts, Science & Culture Initiatives (2010 – 2023)
Faculty Advisory Committee for the 75th anniversary of CP-1 (2016 – 2017)

Roles for Broader Impacts:

University of Chicago

University-Wide

- Leader, Past & Current Women Chairs' Forum (2018 – 2024)
- Faculty Diversity Liaisons (2018 – 2022)
- Provost's Postdoctoral Fellows Advisory Committee [for women & minorities] (2017 – 2019)
- Provost's Women's Leadership Council (2011 – 2016)
- Faculty Advisory Group for Partnership w/ African Inst. for Mathematical Sciences (2015 – 2020)

Physical Sciences Division

- Chair, Faculty Coordination Team on Equity, Diversity and Inclusion (2018 – 2022)
- Committee on Equity, Diversity and Inclusion for staff (2017 – 2018)
- Chair, Women in Science Committee (2012 – 2014)

Physics

- PI, Heising-Simons Program for Women Undergraduate Research Internships (2018, 2019)
- Chair, Conference for Undergraduate Women in Physics, University of Chicago (2014)
- Co-PI, NSF sponsored summer undergraduate program (REU) "Summer Research Projects in Contemporary Physics for Women and Minorities" (2003 – present)
- APS IDEA (Inclusion, Diversity, and Equity Alliance)

U.Chicago, Fermilab and Argonne National Lab

- Chair, Leadership Academy for Women in Science and Engineering (2019 – 2024)

Heising-Simons Foundation

- Physics & Astronomy Leadership Council (2016 – 2020)

Greater Chicago Midwest Higher Education Recruitment Consortium

- Founding Member and Executive Board Member (2007 – 2013)

Expanding Your Horizon Chicago [to engage middle school girls in STEM experiences]

- Founding Member and Faculty Advisor (2015 – 2020)

Initiator & organizer, Bi-annual workshops for Underrepresented Minority Physics Ph.D. students in Illinois (2016 – 2023)

Advisory Roles for Science-Technology-Art:

President, Board of Directors, Chicago Korean Dance Company (2024 – present)
Board, Winifred Haun & Dancers (2015 – present)
Board, the Sejong Cultural Society, Chicago (2013 – present)
Executive Board, Chicago Council on Science and Technology (2010 – 2013)

Professional and Public Services:

U.S.: Scientific Community

American Physical Society (APS)

President (2024) [Vice President (2022), President-Elect (2023), Past President (2025)]

Physics Policy Committee (2020 – 2022)

Chair of Division of Particles and Fields (2020) [Vice Chair (2018), Chair-Elect (2019)]

Board of Directors (2015 – 2017)

Council (2014 – 2017)

Task Force on Expanding International Engagement (2017 – 2018)

Forum on International Physics Executive Committee (2014 – 2017)

Nominating Committee (2006 – 2008)

Executive Committee, Division of Particles and Fields (2000 – 2003)

National Academy of Sciences

Board on Physics and Astronomy (2024 – President)

President, Korean Scientists and Engineers Association (2022 – 2023)

President, Association of Korean Physicists in America (2016 – 2018)

Chair, International Conference on High Energy Physics (2016)

Chair, External Review Committee, Physics Department, Stanford University (2022)

External Review Committee, Physics Department, Arizona State University (2020)

External Review Committee, Physics Department, UC Santa Cruz (2013)

Chair, Long-Baseline Neutrino Experiment, Reconfiguration Steering Committee (2012)

U.S. Linear Collider Steering Group (2002 – 2005)

Muon Collider Technical Advisory Committee (1999 – 2003)

Chair, U.Chicago Program Committee, American Academy of Arts and Sciences (2020 – present)

U.S.: Funding Agencies

Chair, Committee of Visitors, DOE/Office of High Energy Physics (2024)

DOE/NSF High Energy Physics Advisory Panel (HEPAP) (2002 – 2005)

DOE/NSF High Energy Physics Advisory Panel (HEPAP), ex-officio member (2020-2021)

DOE Office of High Energy Physics Basic Research Needs Study on Detector R&D (2019 – 2020)

Chair, NSF Mathematical and Physical Sciences subcommittee (2014 – 2015)

DOE HEPAP Accelerator R&D Subpanel (2014 – 2015)

Co-lead, DOE sponsored Exascale Computing workshop and report (2008 – 2009)

Executive Committee, the CRO (Chief Research Officer) group of 17 DOE labs (2007 – 2010)

DOE/NSF HEPAP Advanced Accelerator R&D Subpanel (2005 – 2006)

U.S.: National Laboratories, Facilities, & Institutes

SLAC Accelerator National Laboratory: Science & Technology Committee (2023 – 2024)

Sanford Underground Research Facility: Strategic Advisory Committee (2020 – 2024)

Lawrence Berkeley National Laboratory: Board (2015 – 2024)

Space Telescope Science Institute: Visiting Committee (2018 – 2021)

Lawrence Berkeley National Laboratory: Accelerator Division Review Committee (2015)

Los Alamos National Lab.: Institutional Science, Technology, and Engineering Capability Review (2018)

Los Alamos National Lab.: Review Committee for Nuclear, Particle and Astro (2014)

Brookhaven National Laboratory: Associate Lab Director Search Committee (2020)

Argonne National Laboratory: Associate Lab Director Search Committee (2020 – 2021)

Argonne National Laboratory: Director Search Committee (2008 – 2009)

Argonne National Laboratory: Chair, High Energy Division Director Search Committee, (2005)

SLAC: Science Policy Committee (2004 – 2008)
Fermilab: Chair, Steering Committee for Long Term Strategies (2007)
Fermilab: Director Search Committee (2004)
Fermilab: Long-Range Planning Committee (2003)
Fermilab: Users Executive Committee (1999 – 2000)

U.S.: Private Foundations

Board, Research Corporation for Science Advancement (2024 – 2024)
Leadership Council, Heising-Simons Foundation - Physics & Astronomy (2016 – 2020)

Canada

Chair, TRIUMF Advisory Committee (2018 – 2023)

Europe

CERN: CERN Large Hadron Collider Committee (2002 – 2004)
ECFA: European Committee for Future Accelerators (2020 – present)
Germany: Chair, Helmholtz Association's Evaluation Panel for Karlsruhe Institute of Technology (2025)
Germany: DESY Science Council (2016 – 2021)
Germany: Chair, DESY Physics Research Committee (2005 – 2009)
Germany: DESY Physics Research Committee (2003 – 2004)
Germany: Quantum Universe Advisory Board, DESY & University of Hamburg (2019 – Present)
France: Science Review Committee of IRFU, CEA, Saclay (2014)
France: LAL Scientific Council, Orsay (2007 – 2010)
Italy: INFN International Advisory Panel (2007 – 2008)
U.K.: Chair, External Review Committee, Physics Department, Oxford University (2020)
U.K.: Chair, Advisory Council, Particle Physics, Oxford University (2016 – 2020)
U.K.: External Review Committee, Physics Department, Oxford University (2014)
U.K.: Initiator & co-Lead, U.K. S&T Facilities Council – Fermilab Collaborations (2012 – 2013)

Asia

Japan: Chair, KEK Science Advisory Committee (2019 – 2023)
Japan: J-PARC International Advisory Committee (2010 – 2012)
Japan: Kavli IPMU External Advisory Committee (2008 – 2016)
Japan: KEK Roadmap Review Panel (2008)
Japan: U.S. – Japan Committee for Cooperation in High Energy Physics (2006 – 2013)
China: Chair, International Advisory Committee for Future Colliders (2015 – 2021)
China: Chair, Beijing-Chicago Connections: Annual Workshop (2012 – 2015)
China: U.S. – China Cooperation in High Energy Physics (2006 – 2013)
South Korea: Board, Korea-US Science Cooperation Center (2022 – present)
South Korea: Chair, International Advisory Committee, Center for the Underground Physics (2014 – present)
South Korea: Chair, International Advisory Committee, Rare Isotope Accelerator Program (2012 – 2020)
South Korea: Chair, Institute of Basic Science Review Panels (2012, 2013, 2014, 2015)
South Korea: Board, Institute of Basic Science (2011 – 2013)
South Korea: Co-Chair, International Advisory Committee, KoRIA (2011)

Africa

Int. Advisory Committee, African Strategy for Fundamental and Applied Physics (2021 – present)
Int. Advisory Committee, Africa School of Fundamental Physics and its Application (2009 – 2019)