# Young-Kee Kim



### **Positions:**

Louis Block Distinguished Service Professor, The University of Chicago (1/2017 – present) 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)

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

Senior Advisor to the Provost for Global Scientific Initiatives, The University of Chicago (7/2020 – present)

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)

President, American Physical Society (2024)

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

# Honors and Awards since 1996 as a faculty member:

Member, National Academy of Sciences (2022)

Member, American Academy of Arts and Sciences (2017)

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)

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)

## **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 – 1990)

#### **Accelerator Science**

Initiator and PI of the accelerator research group at the University of Chicago 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, Beijing Center (2020 – present) Faculty Steering Committee, Delhi Center (2012 – 2020) Faculty Advisory Group for the partnership with African Inst. for Mathematical Sciences (2015 – present) Advisory Council, Gray Center for Arts and Inquiry (2012 – present) Faculty Advisory Council, Arts, Science & Culture Initiatives (2010 – present) Faculty Advisory Committee for the 75<sup>th</sup> anniversary of CP-1 (2016 – 2017)

# **Roles for Equity, Diversity and Inclusion:**

# University of Chicago

### University-Wide

- Leader, Past & Current Women Chairs' Forum (2018 present)
- Faculty Diversity Liaisons (2018 2022)
- Provost's Postdoctoral Fellows Advisory Committee [for women & minorities] (2017 2019)
- o Provost's Women's Leadership Council (2011 2016)
- o 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)
- o 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 – present)

#### **Heising-Simons Foundation**

Physics & Astronomy Leadership Council [to support women physicists&astronomers] (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 – present)

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

# **Advisory Roles for Science-Technology-Art:**

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)

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

APS Physics Policy Committee (2020 – 2022)

APS Division of Particles and Fields: Vice Chair (2018), Chair-Elect (2019), Chair (2020)

APS Board of Directors (2015 – 2017)

APS Council (2014 – 2017)

APS Task Force on Expanding International Engagement (2017 – 2018)

APS Forum on International Physics Executive Committee (2014 – 2017)

APS Nominating Committee (2006 – 2008)

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

President-Elect & President, Korean Scientists and Engineers Association (2021 – 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**

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

DOE/NSF 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

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

Lawrence Berkeley National Laboratory: Board (2015 – present)

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)

#### Canada

Chair, TRIUMF Advisory Committee (2018 - 2023)

# Europe

ECFA: European Committee for Future Accelerators (2020 – present)

CERN: CERN LHeC Advisory Committee (2013 – 2020)

CERN: CERN Large Hadron Collider Committee (2002 – 2004)

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 – present)

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: Chair, International Advisory Committee, Center for the Underground Physics

(2014 - present)

South Korea: Chair, International Advisory Committee, Rare Isotope Accelerator Program

(2012 - present)

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)