

Chang Kee Jung

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Education:

- Ph.D. in Physics, Indiana University (IU)
Bloomington, Indiana, U.S.A., May 1986;
Thesis: Measurement of the F^+ Meson
Lifetime, Advisor: Prof. Harold O. Ogren
- B.S. in Physics, Seoul National University,
Seoul, Korea, Feb. 1979

Employment History:

- 2000-present: *Professor*, SBU
- 1996-2000: *Associate Professor*, SBU
- 1990-1996: *Assistant Professor*, SBU
- 1986-1990: *Postdoc*, SLAC, Stanford U.
- 1982-1986: *Grad. Research Assistant*, IU
- 1980-1982: *Grad. Teaching Assistant*, IU

Honors/Awards:

- Chancellor's Award for Excellence in
Scholarship and Creative Activity, State
University of New York, 2014
- Suwa Prize (shared, J-PARC Neutrino
Beam Group), 2013
- Le Prix La Recherche (shared, T2K
Collaboration), 2012
- Outstanding Faculty (Teacher) Award,
SBU, 2010
- Academy of Teacher-Scholar Award, SBU,
2003
- American Physical Society Fellow, 2002
- Asahi Prize (shared, Super-Kamiokande
Collaboration), 1998
- U.S. Department of Energy, Outstanding
Junior Investigator Award, 1994
- Outstanding Res. Assist. Award, IU, 1986
- Outstanding Assoc. Instr. Award, IU, 1983

Fellowships and Visiting Positions:

- Affiliated Member, Kavli Institute for the
Physics and Mathematics of the Universe
(IPMU), U. of Tokyo, 2013-present
- Project Professor, Kavli IPMU,
University of Tokyo, 2013
- Scientific Assoc., Kavli IPMU,
University of Tokyo, 2012
- Spanish Ministry of Science and Education
Visiting Professor Fellowship, IFAE,
Barcelona, Spain, 2005
- Visiting Professor, KEK, Japan, 1998
- Japan Society for Promotion of Science
(JSPS) Fellow, KEK, Japan, 1998
- Center of Excellence Fellow,
University of Tokyo, 1997

Major Long-Standing Professional Positions in Research:

- 2014-2015: *Member*, Interim International
Executive Board (iIEB) for LBNF
- 2011-2015: *International Co-Spokesperson*,
T2K Collaboration
- 2004-present: *Spokesperson*, T2K US
Collaboration
- 1999- present: *Founder & Chair of the
Steering Committee*, NNN Workshop Series
- 2007-2011: *Elected Member*, Executive
Committee, T2K Collaboration
- 2000-2008: *Spokesperson*, UNO
Collaboration
- 2004-2007: *Spokesperson*, Henderson
Underground Science and Engineering
Project (HUSEP)
- 2002-2007: *Chair*, Interim/International
Board of Representatives, T2K
Collaboration
- 1996-2007: *Co-Spokesperson*, K2K US
Collaboration

Professional Affiliations and Societies:

- Fellow, American Physical Society
- Member, American Association for
Advancement of Science
- Member, Association of Korean Physicists
in America

Professional Services: National and International Committees

(This list excludes internal collaboration positions or services, and services on reviews of various proposals submitted to funding agencies and papers submitted to professional journals.)

- Member (2015-2019), Commission on Underground Research Laboratory (URL) Networking, International Society for Rock Mechanics
- Member (2012), Large-Area Picosecond Photo-Detector (LAPPD) Program Review Panel
- Member (2012), Korean Institute for Basic Science (ibs) Review Panel
- Member (2012), DOE Institutional Review of Fermilab
- Member (2009, 2010, 2012), Spanish Particle Physics Review Panel
- Member (2007-2010), Science Committee, Canfranc Underground Lab, Spain
- Member (2001-2002), Fermilab Annual Program Review Committee
- Member (1998-1999), DOE Review Panel of NuMI/MINOS

Professional Services: Conference Organization and Participation in National and International Working Groups

(This list excludes memberships on international advisory committees of various conferences and workshops.)

- Chair, Steering Committee, NNN Workshop series
- Co-Chair (2015), LOC, NNN15-Stony Brook Workshop, Stony Brook, New York, U.S.A.
- Co-Organizer (2002), NNN02-CERN Workshop, Geneva, Switzerland
- Organizer (2000), NNN00-Fermilab Workshop, Batavia, Illinois, U.S.A.
- Co-Organizer (2000), NNN00-UCI Workshop, Irvine, California, U.S.A.
- Founder and Co-chair (1999), Organizing Committee, International Workshop on Next generation Nucleon decay and Neutrino detector (NNN99), Stony Brook, New York, U.S.A.
- Co-convener (2011), Proton Decay Working Group, Fundamental Physics in Intensity Frontier, Rockville, Maryland, U.S.A.
- Member (2006 - 2007), FNAL-BNL working group on very long baseline neutrino superbeam experiment
- Organizer (2006), Science and Engineering at Henderson DUSEL Capstone Workshop, Stony Brook, New York, U.S.A.
- Member (2005 - 2006), European International Scoping Study for future neutrino programs
- Co-leader (2004 - 2006), Deep Underground Science and Engineering Lab (DUSEL) Proton decay working group
- Organizer (2004), K2K Workshop, Stony Brook, New York, U.S.A.
- Co-Organizer (2004), Unification Day Workshop, Keystone, Colorado, U.S.A.
- Member (2003 - 2004), APS joint study on neutrino physics working groups
- Member (1997), Local Organizing Committee, XIIth Hadrons in Collisions Symposium, Stony Brook, New York, U.S.A.
- Member (1996), Parallel Session Organizing Committee, 1996 Annual American Physical Society Meeting, Indianapolis, Indiana, U.S.A.
- Chair (1993), Local Organizing Comm., The DØ workshop, Stony Brook, New York, U.S.A.

Research Experience (Experiments/Collaborations):

HRS at PEP, MarkII at SLC, SSC, DØ at TeVatron, Super-Kamiokande, K2K, UNO, T2K

Total Number of Advisees:

Postdoctoral Researchers, 10; Graduate Students (Ph.D.), 17; Graduate Students (M.S.): 4, Undergraduate students (B.S.), 18; and Undergraduate students (Short Term), 17

Total Number of Refereed Journal Articles: 241

(For complete listing of publication, invited conference presentations, colloquia and seminars, See http://nngroup.physics.sunysb.edu/~alpinist/cvckj_14.pdf)

Brief Summary of Past Research: My research in Neutrino and Nucleon decay (NN) physics started when I joined Super-Kamiokande (SK) in 1991 and established Stony Brook NN group. It was motivated by the important role proton decay plays in Supersymmetry and in Grand Unification Theories, and the presence of the atmospheric neutrino anomaly at that time. Since then I have been lucky to be part of major historic discoveries and advances in neutrino physics, such as discovery of non-zero neutrino mass through atmospheric neutrino oscillation, SK; confirmation of the atmospheric neutrino oscillation in the first accelerator based long baseline neutrino oscillation experiment, K2K; and observation of electron-neutrino appearance from a muon neutrino beam, T2K. In these experiments I, with the Stony Brook NN group, have made various significant contributions, most notably, in T2K. My involvement in T2K started from the inception of the experiment. While working on K2K, I got involved in the early discussion of T2K as the logical next step. I was the chair of the Interim/International Board of Representatives (IBR) that played a central role in forming a truly international collaboration (500 members, 59 institutions and 12 countries). I drafted the T2K International Collaboration Agreement and served as an elected member of the executive committee and most recently as International Co-spokesperson for the past four years. I also led and managed the T2K US construction projects that were all completed on time and under budget. The physics topics covered by the Stony Brook NN group at SK/K2K/T2K are: neutrino oscillation, proton decay searches, relic supernova neutrino search, tau neutrino appearance, astrophysical neutrino source searches, and $\nu_\mu \text{NC} 1\pi^0$ (on water), $\nu_e \text{CC} \text{inc}$ (on water) and $\nu_\mu \text{CC} 1\pi$ cross-section measurements.

My past research activities outside of SK/K2K/T2K include: participation in the construction of the first “straw” drift chamber (HRS at PEP/SLAC); construction of a synchrotron radiation monitor for the SLC energy spectrometer that provided a precision measurement of the beam energy, which was used in the measurement of the Z boson mass; construction of a vertex BPM for the SLC final focus that recorded the first collision of the SLC beams; participation in the SLC arc and final focus beam tuning and monitoring; first measurement of the F^+ meson lifetime in e^+e^- collisions; contribution to understanding of the tau lepton decay puzzle; search for neutral heavy leptons and SUSY particles (MarkII at SLC and D0 at TeVatron).

My additional leadership experience other than T2K includes: serving as Co-Spokesperson of the K2K US group, founding and leading the UNO (Underground Nucleon decay and Neutrino Observatory) and the HUSEP (Henderson Underground Science and Engineering Project) collaborations, and founding the Next generation Nucleon decay and Neutrino detectors (NNN) international workshop series in 1999. These workshops started the international discussion of next-generation NN detectors beyond SK in earnest. To date, the NNN workshop series has been providing a yearly forum for in-depth discussions of next generation NN detectors.

The Stony Brook NN group is currently involved in the CAPTAIN LAr TPC experiment and the ELBNF 35-ton prototype. We plan to participate in beamline optimization, and design and construction of near/far detectors. I served on the (interim International Executive Board (iIEB) of LBNE, and co-chaired the iIEB subcommittee which produced the “Memorandum of the Collaboration” document that provides the interim governance rules for ELBNF and “Order of Business” that specifies the timeline of the initial collaboration formation process. Currently I am chairing the ELBNF collaboration governance document committee appointed by the IB.

Of all my past research experiences and accomplishments, I am most proud of the 10 postdocs and 17 Ph.D. students whom I had the pleasure to advise and work with.