# Joseph D. Lykken

**A. Personal**
Citizenship: United States

**B. Education**
- Massachusetts Institute of Technology, Ph.D. – Feb. 1982
- University of Minnesota, B.A. – June 1977

**C. Awards and Honors**
- Fellow, American Association for the Advancement of Science, 2003
- Fellow, American Physical Society, 1999

**D. Professional Employment**
- 2014: Deputy Director and Chief Research Officer, Fermilab
- 2005- : Scientist III, Fermilab
- 2001-2005: Professor part-time, University of Chicago
- 2001-2005: Professor, Enrico Fermi Institute
- 2005: Visiting Professor, Universitat de Valencia, Valencia, Spain
- 2000: Visiting Professor, Univ. of Wisconsin, Madison, WI
- 1989-2005: Assoc. Scientist, Scientist I, II, Fermilab
- 1987-1989: Research Scientist, Santa Cruz Inst. for Particle Physics
- 1982-1987: Research Associate, Univ. of Texas, CCNY, Los Alamos National Lab

**E. Selected Professional Duties:**
- P5 subpanel of HEPAP, 2013-2014
- CMS collaboration, 2007-
- Scientists Advisory Council (SAC), Fermilab, 2013-
- Americas Linear Collider Committee (ALCC), 2013-
- PAC of the Linear Collider Collaboration (LCC), 2013-
- DOE HEP Committee of Visitors, 2013
- NSF Physics Division Committee of Visitors, 2013
- Chair, External Advisory Board, Kavli Inst. for Cosmological Physics, U. Chicago, 2011-
- Trustee, Aspen Center of Physics, 2007-2013
- Board on Physics and Astronomy, National Academy of Sciences, 2009-2012
- Chair and vice-chair, Sakurai Prize Committee, American Physical Society, 2010-2011
- DOE/NSF HEPAP, 2007-2009
- P5 subpanel of HEPAP, 2008-2010
- Young Scientist Award Committee, C11 of IUPAP, 2007
- Co-editor, Fermilab Steering Group Report on Project X, 2007
- U.S. LHC Communications Task Force, DOE/NSF, 2007
- Co-editor, ILC Reference Design Report Volume 2, "Physics at the ILC", 2007
- Chair-line of the Division of Particles and Fields of the APS, 2004-2007
- Co-chair, HEPAP subpanel "Discovering the Quantum Universe", 2005-2006
- Advisory Board, TASI school, 2005-2008
- Advisory Board and Steering Committee., KITP Santa Barbara, 2004-2006
- Physics Advisory Committee, Fermilab, 2000-2004
- HEPAP subpanel "Quantum Universe", 2003-2004

- Director Search Committee, Fermilab/URA, 2004
- Experimental Program Advisory Committee, SLAC, 2001-2003
- Subpanel on German Physics, Wissenschaftsrat, 2001
- HEPAP subpanel on Long-Range Planning, 2000-2001
- Muon Collider Technical Advisory Committee, DOE, 1999-2001
- Visiting Expert, Physics Division, National Science Foundation, 1998-1999

**F. Selected Teaching**

- Masters/Ph.D. mini-course, University of Valencia, 2014
- ICTP-SAIFR School on Particle Physics in the LHC Era, Sao Paulo, 2013
- CMS Data Analysis School, 2012, 2010
- SLAC Summer Institute, SLAC, 2012, 2005, 2004
- TASI summer school, Boulder, 2011, 2001, 2000, 1996
- CERN/JINR European School of High Energy Physics, Bautzen, 2009
- CERN RTN Winter School, CERN, 2007
- Quantum Field Theory III (P445), University of Chicago, 2004
- Particle Physics (P363), University of Chicago, 2003, 2002
- String Theory (Physics 805), University of Wisconsin at Madison, 2000
- CTEQ summer school, Madison, 2002
- KIAS summer school, Seoul, 1998
- ICTP summer school, Trieste, 1995

**G. Selected Publications**

1. Have we observed the Higgs (Imposter)? (with I. Low and G. Shaughnessy), Phys. Rev. D86 (2012) 093012.
2. Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC CMS Collaboration (Serguei Chatrchyan et al.), Phys.Lett. B716 (2012) 30-61.
3. Light Sterile Neutrinos: A White Paper (with K.N. Abazajian et al.), arXiv:1204.5379 [hep-ph]
4. Higgs look-alikes at the LHC, (with A. De Rujula, M. Pierini, C. Rogan, M. Spiropulu), Phys. Rev. D82 (2010) 013003.
5. The soft supersymmetry-breaking lagrangian: theory and applications, (with D.J.H. Chung, L. Everett, G. Kane, S.F. King, and L.T. Wang), Physics.Reports 407 (2005).
6. Neutrinos as the messengers of CPT violation, (with G. Barenboim, L. Borissov and A.Y. Smirnov), JHEP 0210 (2002) 001.
7. The shape of gravity, (with L. Randall) JHEP 0006 (2000) 014.
8. On Kaluza-Klein states from large extra dimensions, (with T. Han and R.J. Zhang), Phys. Rev. D59 (1999) 105006.
9. Weak scale superstrings, Phys. Rev. D54 (1996) 3693.
10. Supergravity as the messenger of supersymmetry breaking, (with L. Hall and S. Weinberg), Phys. Rev. D27 (1983) 2359.