

Karl A. van BIBBER

Shankar Sastry Chair of Leadership and Innovation

January 2020

Education

B.S. Physics MIT (1972)

B.S. Mathematics MIT (1972)

Ph.D. Physics MIT (1976)

*Ph.D. Thesis – “Study of the Gamma Deexcitation Following Deep Inelastic Scattering of ^{16}O with ^{27}Al ”
(Advisor – Stephen G. Steadman)*

Employment

2019– Executive Associate Dean, College of Engineering, UC Berkeley
2017– Associate Dean for Research, College of Engineering, UC Berkeley
2012– University of California Berkeley, Professor & Chairman, Nuclear Engineering Faculty, Nuclear Science Division, Lawrence Berkeley National Laboratory
2012-2017 Executive Director, Nuclear Science & Security Consortium (DOE Center of Excellence)
2009-2012 Naval Postgraduate School, Vice President & Dean of Research
1985-2008 Lawrence Livermore National Laboratory
1985-91 Senior Physicist, E-Div.
1991-01 Group Leader for High Energy Physics & Accelerator Technology
1993-99 LLNL Leader, SLAC-LBNL-LLNL PEP-II B Factory Project
2001-02 Chief Scientist, Physics & Advanced Technologies
2002-07 Deputy Director, Laboratory Science and Technology Office
2002-07 Deputy Director Laboratory Directed R&D Program
2007-08 Chief Scientist, Physical & Life Sciences Directorate
1980-1985 Stanford University, Assistant Professor of Physics
1977-1979 Lawrence Berkeley National Laboratory, Postdoctoral Researcher
1977-1978 University of California Berkeley, Lecturer, Dep’t. of Nuclear Engineering
1976-1977 MIT, Instructor, Department of Physics

Professional Societies

Fellow, American Physical Society
Fellow, American Association for the Advancement of Science
Member, American Nuclear Society

Professional Recognition

Navy Superior Civilian Service Award (2012)
Elected Fellow of the American Association for the Advancement of Science (2007), *“For distinguished contributions to the field of astrophysics and particle accelerator physics, particularly for efforts in the dark matter axion search”*
“Karl van Bibber Physics Postdoctoral Research Fellowships” endowed at Stanford University *Five endowed 2005 by anonymous industrialist donor*
Elected APS Fellow 2001, *“For his leadership in an ultra-sensitive search for dark-matter axions, and the conception of other elegant experiments for detection of the axion”*
DOE Deputy Secretary’s Award for the B Factory, *on behalf of the LLNL team*, (2000)
LLNL S&T Award, *with BaBar team for discovery of CP-violation in the B-Meson System* (2002)
LLNL Director’s Distinguished Performance Award for the B Factory (1997)
Alfred P. Sloan Research Fellowship (1982)
Phi Beta Kappa (1972)

Research Activities

Nuclear Physics
Particle Physics
Particle Astrophysics
Nuclear Instrumentation
Accelerator Science & Technology

Professional Service *(selected)*

MIT Corporation member of Nuclear Science and Engineering External Advisory Board
High Energy Physics Advisory Panel (DOE-NSF, 2015-2018)
Chair, UC Davis Department of Physics, External Advisory Committee (2018 -)
Chair, University of Florida, Nuclear Engineering Review Committee (2017)
Chair, University of Illinois, NPRE Department Review Committee (2014)
Fusion Energy Sciences Advisory Board (DOE), Strategic Planning Subcommittee (2014)
Chair, Nuclear & Particles Futures Capability Review, LANL (2014, 2018)
Search Committee, LLNL Director (2014)
Member, Board of Directors, John & Fannie Hertz Foundation (2011-2014)
Hertz Foundation Graduate Fellowship Selection Committee (2006–2017)
Member, Board of Directors, US-Singapore Temesek Defence Sciences Institute (2009-2012)
Edward Teller Centennial Symposium, Chair, Organizing Committee (2008)
Executive Committee, Amer. Phys. Soc., CA-NV Section (2008-2011), Chair (2010)
European Commission VIth & VIIth Framework Program Expert Panel (2002-2011)
National Science Foundation review panels, multiple (2000-present)
Lawrence Livermore National Laboratory, Directorate Review Committees, multiple (2012-2014)
Los Alamos National Laboratory, Chair Capability Review Panels, multiple (2002-present)
Member, Editorial Board, *The SLAC Beam Line* (1997-2000)
Member, Board of Directors, Wang NMR, Inc. (1997- 2002)
Member, SLAC Users Organization Executive Committee (1990-1993)
Chairman, Executive Committee, LBNL 88" Cyclotron Users Group (1983-1985)
Phi Beta Kappa Executive Council, Stanford University (1983-1985, President 1984-1985)
APS Division of Nuclear Physics Program Committee (1980-1982)

Previous M.S. & Ph.D. students

Prof. Keith Griffioen	(Ph.D. 1984)	<i>Department of Physics, College of William & Mary</i>
Dr. Peter Countryman	(Ph.D. 1988)	<i>Synarc, San Francisco</i>
Dr. S. Darin Kinion	(Ph.D. 2001)	<i>Lawrence Livermore Nat'l Lab</i>
Dr. Cameron Bates	(Ph.D. 2015)	<i>Los Alamos National Laboratory</i>
Dr. Lucas Brouwer	(Ph.D. 2015)	<i>Lawrence Berkeley National Laboratory</i>
LtJG Austin Lo	(M.S. 2015)	<i>US Navy Nuclear Propulsion Program</i>
Dr. Alexandra Asghari	(Ph.D. 2016)	<i>Exponent, Inc.</i>
Mr. Jaben Root	(M.S. 2016)	<i>Lawrence Livermore National Laboratory</i>
Dr. Patricia Schuster	(Ph.D. 2016)	<i>University of Michigan</i>
Dr. David Weisz	(Ph.D. 2016)	<i>Lawrence Livermore National Laboratory</i>
Dr. Cory Waltz	(Ph.D. 2016)	<i>Lawrence Livermore National Laboratory</i>
Dr. Albert Yuen	(Ph.D. 2016)	<i>San Francisco startup</i>
Dr. Laurence Lewis	(Ph.D. 2018)	<i>National Nuclear Security Agency</i>
Dr. Nnaemeka Nnamani	(Ph.D. 2019)	<i>UC Berkeley Department of Nuclear Engineering</i>
Dr. Mauricio Ayllon Unzueta	(Ph.D. 2019)	<i>NASA Goddard Space Flight Center (April 2020)</i>
Dr. Maria Simanovskaia	(Ph.D. 2020)	<i>UC Berkeley Department of Nuclear Engineering</i>

Current doctoral students

Alex Droster	Fumika Isono
Saad Al Kenany	Liona Fan-Chiang
Samantha Lewis	Arnika Chidambaram

Publications & Patents

Published 150 peer-reviewed articles, edited five books, awarded one patent.