

Curriculum Vitae of Prof. Meenakshi Narain

Address: Physics Dept., Brown University, 182 Hope Street, Providence, RI, 02912

Professional Appointments:

Mar 2019-Feb 2022 Member, DOE & NSF High Energy Physics Advisory Panel
Since May 2019 Co-Chair, Brown Data Science Initiative Campus Advisory Board
Since June 2018 Chair, U.S. CMS Collaboration Board
Since June 2018 Member, Management Board, CMS Experiment
2018-2019 Visiting Professor, Indian Institute of Technology, Mumbai, India
2018-2019 Adjunct Professor, NISER, Bhubaneswar, India
Oct 2016 Affiliate Faculty, Data Science Initiative, Brown University
July 2010 Professor, Brown University
Jan'07-June'10 Associate Professor, Brown University
2007 Fellow of the American Physical Society.
Jun-Aug 2008 Visiting Researcher, IPHC, Strasbourg, France.
Sep-Dec 2006 Fellow, Radcliffe Institute for Advanced Studies, Harvard University
Apr-Aug 2006 Visiting Scientist, Albert-Ludwigs-Universitat, Freiburg
2004-2006 Associate Professor, Boston University
1999-2004 Assistant Professor, Boston University
1998-1999 Visiting Professor, Boston University
1995-1999 Wilson Fellow, Fermi National Accelerator Laboratory, IL
1991-1995 Postdoctoral Research Associate, FNAL
1986-1991 Visiting Fellow, Laboratory of Nuclear Studies, Cornell University

Education:

1991 Ph.D. in Physics from State University of New York, Stony Brook
Thesis Topic: "Inclusive Photon Spectra from Upsilon States"
Thesis Advisor: Professor Juliet Lee-Franzini

Professional Activities and HEP Community Service:

- Member of HEPAP, since May 2019
- USCMS S&C postdoctoral fellowship selection committee, 2019
- Panel member, "Higgs boson as a new tool for discovery", DOE "Basic research needs workshop for Instrumentation", 2019.
- USATLAS Phase II upgrade NSF MREFC internal review committee 2019
- DOE/SC Status Review of the DESI Project, November, 2018
- Member, APS DPF Fellowship Selection Committee, 2018
- Member, APS DPF Panofsky Prize Selection Committee, 2017-2018
- LSST-DESC Operations planning Review, May 2018, Department of Energy
- Co-Chair, 5th Anniversary Conference of the ICISE, Aug 2018, Quy Nhon, Vietnam.
- US Belle-II Operations Review, April 2017, Department of Energy
- LSST-DESC Operations planning Review, April 2017, Department of Energy
- FY 2018 DOE/HEP U.S. Japan Review Panel, Department of Energy

- Coordinator, LHC Physics Center, Jan 2013-Dec 2016
- 2013-2017 Distinguished Researcher Fellowship Review Committee Chair
- DOE Panel Review of Argonne National Laboratory, Argonne, IL, May 2015
- Consultant, Particle Data Group (2002 – present) – Review of Particle Properties: Dynamical electroweak symmetry breaking (<http://pdg.lbl.gov/>)
- Member, DPF Nominations Committee for Executive Committee, 2012-2014
- Member, Board of Directors, Quy Nhon Science and Education Foundation
- Member, LHC Physics Center Management Board, Fermilab, since Jan 2010-2012.
- Member, External Advisory Board, WiSE Group at Boston University (Jan 2007-2009)
- Acting Chair, Women in Science and Engineering, at Boston University, Fall 2005
- Member, URA Visiting Committee for Fermilab 2002-2004
- Reviewer of NSF and DOE proposals for base grant and Early Career Awards including Panel Reviews [full list available on request]

Service to the CMS Experiment:

Since Aug 2018. Member CMS Diversity Office
 Sep'17-Aug'18 Founding Co-Chair CMS Diversity Office
 2016-2018 Co-Convener Upgrade Physics and Performance Studies Group
 Since 2016 L3 manager for U.S.CMS HL-LHC Outer Tracker Modules
 2017 Member, Management Board, LHC Physics Center, Fermilab
 Jan'13-Dec'16 Coordinator, LHC Physics Center, Fermilab
 Since 2015 PI of the Brown HEE group to the CMS Collaboration Board.
 2016-2017 Convener Upgrade Physics and Performance Studies Group (HL-LHC)
 2013-2015 Member CMS Schools Committee
 2012-2015 BTV group liaison to the CMS upgrade
 2012 LHC Physics Center Fellow, Fermilab
 2011-2012 co-convener, CMS B-tagging and Vertexing (BTV) group
 Sep 2009-2010 co-convener, Resonances subgroup of CMS Exotica Physics Group
 2007-2009 Lepton+Jets+Missing ET physics group co-convener at the FNAL LPC
 2007-2010 Co-ordinator for Hadron Calorimeter Databases
 2006-2007 b-tagging group co-convener at the FNAL LHC Physics Center

Service to the Dzero Experiment:

Since Sep 2008 Level 3 Manager: Dzero Reconstruction Certification Manager for Run II
 Jul 2002-2006 Level 3 Manager: Upgrade of the Level 1 Central Track Trigger for Run II
 Jul 2002-2004 Co-leader: Run II b-quark identification group
 Jun 2001-2002 Co-leader: Run II Higgs Analysis Group
 Jun 2000-2001 Co-leader: Run II Higgs and Top Analysis Group
 Since Jul 1999 Design, development, construction of the Silicon Track Trigger for Run II
 1996-2000 Co-leader: Run II Vertex Reconstruction Software
 1996-1998 Co-leader: Run II Silicon Vertex Detector Reconstruction Software
 1995-1996 Leader: $t\bar{t} \rightarrow$ lepton + jets Analysis Group
 1993-1995 Leader: $t\bar{t} \rightarrow$ dileptons Analysis Group
 1994-1996 Leader: Electron Reconstruction and Identification Group
 1994-1996 Leader: Calorimeter Reconstruction Software

1994 Responsible for tt Trigger Definitions

Grants and Awards:

2007 Fellow of the American Physical Society.
Since 1998 – Continuous funding from Department of Energy
2008 Career Development Award by the ADVANCE program at Brown
2006 Fellowship Program, Radcliffe Institute of Advanced Studies
2004 Major gift from the Xilinx Foundation for the D0 Level-1 Central Track Trigger
2002 NSF Major Research Infrastructure for D0 Level-1 Central Track Trigger
2000 NSF Faculty Early Career Development Award (CAREER)
2000 DOE Outstanding Junior Investigator Award
1999 NSF Major Research Infrastructure Grant for the Silicon Track Trigger
1998 Outstanding Junior Investigator, Department of Energy
1984 General Proficiency Prize for Best Outgoing Student, M.Sc., IIT Kanpur, India
1983 Certificate of Merit for Academic Proficiency (M.Sc. 1st year)
1982 University Gold Medal, B.Sc., Gorakhpur University, India

On Campus Service Activities at Brown University:

July 2020 Member, Faculty Hearing Committee for Allegations of Gender Based Discrimination
2016-2018 Member C-STEM Initiative, Swearer Center for Public Service
Spring 2016 Member: Research Computing Advisory Committee
Spring 2015 Member: Core Computation Task Force
2012-2015 Member Research Advisory Board
2012-2014 Member International Affairs Faculty Committee
Since 2008 Member of University wide Science Center Advisory Board
2010-2011 Member, International Affairs Advisory Board
2009-2010 Member, search committee for the Dean of the Graduate School
2009-2010 Randall Advisor for Sophomore students
2007-2009 Freshmen Advisor
2007 Member, Undergraduate Science Education Committee

Department:

AY 2016-2019 Chair: Physics Department Diversity and Inclusion implementation
AY 2015-16 Chair: Computer Committee
Spring 2015 Undergraduate Affairs advisor, Physics Department
AY 2010-12 Department Graduate Student Advisor
Fall 2009 Co-chair, gender and equity visit by the APS
2009 Member, Tenure and Promotion Committee for two junior faculty
2009 Member, HEP contact for Department self study preparation
2009-2010 Chair of Brown Degree Day event
2008 Member of ad-hoc committee on introductory physics courses
2007-2010 Chair of Publications and Outreach Committee.
2007-2010 Member of the Computer Committee.

2007-2010 Advisor to Physics chapter of Women in Science and Engineering group

Public Outreach, Conference and Workshop Organization:

- Organizer and Founder: “Big Bang Science Fair”, an annual event at the WaterFire Providence, a public outreach event to promote appreciation of Science to the community (4000+ visitors).
<https://waterfire.org/big-bang-science-fair-at-waterfire-providence-on-september-22-2018/>
<https://waterfire.org/schedule/2019-waterfire-providence-event-schedule/>
- Co-Chair, “Windows on the Universe”, Conference to commemorate 25th anniversary of Rencontres du Vietnam & 5th Anniversary of the ICISE, Aug 2018, Quy Nhon, Vietnam.
- Co-organizer of “Physics at the Future Colliders” sessions at the International LHCP 2017 conference, Shanghai, China May 2017.
- Brown University Organizer and Liaison to “2016 Leadership Conference”, August 2016, RICC, Providence, RI.
- Co-Organizer of “Women in technology” and “Poster session on science and technology partnership”, at the 2016 Leadership Conference, August 2016, RICC, Providence, RI.
- Co-Organizer “Pathways”, Boston University, MA

Public Lectures:

- “The Early Universe and the Large Hadron Collider”, Brown Alumni Club, Vero Beach, Florida, January 2018.
- “The Early Universe and the Large Hadron Collider”, Lotus Valley International High School, New Delhi, India, January 2016.
- “The Higgs Boson Discovery and its Implications” at the Rencontres de Moriond QCD and High Energy Interactions, La Thuile, Italy, March 9-16, 2013
- Inaugural Lecture/Conversation, Tougaloo College (MS) students virtual science workshop series ‘Origins’: “The Big Bang Occurred.... Then What ??”, April 19, 2013.
- “Journey to the Early Universe”, Brown University, Providence, RI, June 13, 2012.
- **“Journey to the Early Universe”, TEDx Moses Brown, Providence, RI, April 19, 2012.**
- NOVA, ScienceNow Magazine, July 10 2007, “CERN -The Big Deal”.
(<http://www.pbs.org/wgbh/nova/sciencenow/3410/02.html>)
(<http://www.pbs.org/wgbh/nova/scienceno bigdeal.html>)