

Curriculum-Vitae

Dr. Neeti Parashar

Professor of Physics

Purdue University Northwest, Hammond, IN 46323

Tel: (219)-989-2722, (630)-840-6368; Email: parashar@pnw.edu, neeti@fnal.gov

Educational Background

- **Ph.D. High Energy Physics, 1991-1995 (work completed in 2 years with 5 international peer-reviewed journal publications)**
“Intermittency, Moments and Correlations in High Energy Interactions”
University of Delhi, Delhi, India
- **M. Sc. Physics, 1989-1991 (MERIT POSITION) ***
University of Delhi, Delhi, India
Rank in the University – 4th out of 200
- **B. Sc. (Honors) Physics, 1986-1989 (MERIT POSITION) ***
University of Delhi, Delhi, India
Rank in the University – 7th out of 400

* Merit Position is recognized for the first 10 ranked students, based on the highest academic achievement. Rank for each degree is specified.

Professional Experience

- **Professor, since August 2012**
Purdue University Northwest, Hammond, Indiana, USA
- **Associate Professor (tenured), August 2008 – July 2012**
Purdue University Calumet, Hammond, Indiana, USA
- **Assistant Professor (tenure-track), August 2005 – July 2008**
Purdue University Calumet, Hammond, Indiana, USA
- **Assistant Professor (tenure-track), September 2002 - July 2005**
Louisiana Tech University, Ruston, Louisiana, USA
- **Post-Doctoral Research Associate, November 1997 - August 2002**
Northeastern University, Boston, USA
- **INFN Fellowship from the government of Italy, 1995-1997**
Istituto Nazionale di Fisica Nucleare (INFN), Pisa, Italy
- **Visiting Scientist, 1995**
University of Oxford, Oxford, England

Awards, Honors, Recognition and Accomplishments

- **European Physical Society Prize in High Energy Physics**, to the CDF and D0 Collaborations “for the discovery of the top quark and the detailed measurement of its properties”, 2019
- **Overall Up and Coming Influential Woman Award of Northwest Indiana in all 11 categories**, Avalon Manor, November 6, 2014
- **Up and Coming Influential Woman Award of Northwest Indiana** in the Education Category at Avalon Manor, November, 6 2014
- **Best Performance in Research Award for College of EMS**, by Sponsored Programs on Faculty Research Day, Purdue University Calumet, October 21, 2014
- **Fellows Award** from **The Society of Innovators of Northwest Indiana** for contributions to the discovery of the Higgs Boson, Horseshoe Casino Ballrooms, Hammond, October 16, 2014
- **Established Purdue University Calumet as the Education and Outreach Center in High Energy Physics, called QuarkNet, 2014**
- **Co-author on the “DISCOVERY OF THE HIGGS BOSON”, CMS Collaboration, 2013 and 2014**
- **Outstanding Faculty Scholar Award** at Purdue University Calumet, 2012-2013
- **Outstanding Faculty Teacher Award** at Purdue University Calumet, 2012-2013
- **Distinguished Chancellor Faculty Lecturer** at Purdue University Calumet, 2013
- **Received “Outstanding Commitment to Sponsored Programs Award”,** for winning grants of more than \$100,000 in the last two years, at the Sponsored Programs Recognition Reception at PUC, September 2012
- **Recognized by the Purdue President, Tim Sands, for contributions to Higgs search and the discovery of the new boson at Purdue Board of Trustees, July 2012**
- **Author and collaborator to the discovery of a new boson at Compact Muon Solenoid Experiment** at the Large Hadron Collider, July 2012
- **Outstanding Teaching Contribution to Pearson Publishing Company, 2012**
- **Outstanding Faculty Scholar Award** at Purdue University Calumet, 2007-2008
- Author to the **discovery of single top quark** on the DZERO (pronounced DEE-ZERO) experiment at Fermi National Accelerator Laboratory (2008)
- Author to the **discovery of “Cascade-b” particle** on the DZERO experiment at Fermi National Accelerator Laboratory (2007)
- **Special Award from the National Society of Black Engineers at Louisiana Tech University for advising the students (2004)**
- **Speaker of science for educational institutions - State of Louisiana Board of Regents (2003)**

Recent Grant Awards at Purdue University Northwest

- Research in High Energy Physics on the CMS experiment
07/01/2019 – 06/30/2022 (3-yr base grant)
Funded by National Science Foundation (NSF): \$525,783
- US-CMS Operations at the LHC
01/01/2017 – 12/31/2020
Funded by National Science Foundation (NSF), via Cornell University: \$15,044
- QuarkNet Program at Purdue University Northwest
06/01/2014 – 08/31/2020
Funded by National Science Foundation (NSF), via University of Notre Dame: \$69,180
- U.S. CMS Phase-1 Upgrades
06/15/2014 – 04/30/2019
Funded by National Science Foundation (NSF): \$159,313
- Research in High Energy Physics on the CMS experiment
05/15/2015 – 04/30/2018 (3-yr base grant)
Funded by National Science Foundation (NSF): \$407,745
- Postdoctoral research on CMS
11/01/2015 – 10/30/2016
Funded by Department of Energy (DoE): \$45,984
- Postdoctoral research on CMS
10/01/2014 – 09/30/2015
Funded by Department of Energy (DoE): \$42,097
- Research in High Energy Physics on the CMS experiment
06/01/2012 – 05/31/2015
Funded by National Science Foundation (NSF): \$300,000
- Research in High Energy Physics on the CMS experiment
09/15/2009 – 08/31/2014
Funded by National Science Foundation (NSF): \$341,000
- A proposal to NSF for research in High Energy Physics at the CMS and D0 experiments
04/1/2005-04/30/2010
Funded by National Science Foundation (NSF): \$230,000

Post-Doctoral Associates Supervised at PNW

- **Dr. Tongguang Cheng:** CMS project (2016-todate): CMS Achievement Award recipient, 2020
- **Dr. Sheila Amaral:** CMS project (2016-2017)
- **Dr. John Stupak:** CMS project (2012 – 2016): Assistant Professor, University of Oklahoma
- **Dr. Samir Guragain:** CMS project (2011-2012)
- **Dr. Pratima Jindal:** CMS project (2008-2011)
- **Dr. Vesna Cuplov:** CMS and DZERO projects (2006-2008)

Recent Invited Presentations

- **“Discovery of the God particle at the Largest Scientific Machine”**, Invited Colloquium Talk, Maharishi Dayanand University, Vaish Collge, Baba Mast Nath University, Rohtak, India, December 4-5, 2019
- **“Physics at the Largest Scientific Machine”**, Invited Colloquium Talk, Kurukshetra University, India, December 20, 2018
- **“Current Motivation in Particle Physics”**, PNW Days of Discovery, Purdue University Northwest, April 4, 2018
- **“The Higgs Boson on your Desktop”**, Munster High School, Munster, Indiana, April 3, 2018
- **“The Higgs Boson on your Desktop”**, Merrillville High School, Merrillville, Indiana, March 27, 2018
- **“Physics at the Largest Scientific Machine”**, Invited Colloquium Talk, Valparaiso University, Indiana, February 23, 2018
- **“The Discovery of the “God Particle & What it Means to You”**, DBPRDM College for Women, India, December 8, 2017
- **“Research in High Energy Physics at PNW”**, Presented to the Naval Surface Warfare Center delegation from Crane, Indiana, Purdue University Northwest, November 16, 2017
- **“The Discovery of the “God Particle & What it Means to You”**, Summer Students STEM Camp, Greater First Baptist Church, July 20, 2017
- **“The Discovery of the God Particle & What it Means to You”**, Mody University, India, April 18, 2017
- **“The CMS Pixel Upgrade”**, 18th International Workshop on Radiation Imaging Detector, Barcelona, Spain, July 4, 2016
- **“Role of Purdue University Northwest in High Energy Physics”**, ASM International Teacher Training Camp at Purdue University Calumet, June 22, 2016
- **“Why should you care about the Higgs Boson”**, Ramjas Public School, Delhi, India, February 8, 2016

Membership in Professional Organizations

- American Physical Society Lifetime Member, Division of Particles and Fields, USA
- Honorary Lifetime membership to Society of Innovators, Indiana
- Member of QuarkNet outreach Program for High Energy Physicists
- Distinguished member of Sigma Pi Sigma Chapter of Society of Physics Students, USA
- Women Scientist Association, USA
- Fermilab Users Group, USA
- Physical Society, University of Delhi, India
- Italian Physical Society, Italy
- Indian Academy of Sciences

Publications

- **Published more than 1500 research articles in peer-reviewed, international journals.**
- A complete list can be found at: <http://inspirehep.net/search?p=find+author+parashar,+n>

CITATIONS SUMMARY

Generated on 2020-02-13

1526 papers found, 1521 of them citeable (published or arXiv)

Citation summary results	Citeable papers	Published only
Total number of papers analyzed:	<u>1,521</u>	<u>1,450</u>
Total number of citations:	143,742	141,559
Average citations per paper:	94.5	97.6
Breakdown of papers by citations:		
Renowned papers (500+)	<u>25</u>	<u>24</u>
Famous papers (250-499)	<u>64</u>	<u>62</u>
Very well-known papers (100-249)	<u>247</u>	<u>246</u>
Well-known papers (50-99)	<u>422</u>	<u>421</u>
Known papers (10-49)	<u>588</u>	<u>579</u>
Less known papers (1-9)	<u>140</u>	<u>107</u>
Unknown papers (0)	<u>35</u>	<u>11</u>
h_{HEP} index [?]	168	168

SELECTED RENOWNED PAPERS (Cited 1000+)

- Measurements of the Higgs Boson Production and Decay Rates and Constraints on its Couplings from a Combined ATLAS and CMS analysis of the LHC pp collision data at $\sqrt{s} = 7$ and 8 TeV
ATLAS and CMS Collaborations (Georges Aad (Marseille, CPPM) et al.)
JHEP 1608 (2016) 045
- Combined Measurement of the Higgs Boson Mass in pp $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS Experiments
ATLAS and CMS Collaborations (Georges Aad (Marseille, CPPM) et al.)
Phys. Rev. Lett. 114 (2015) 191803
- 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.
- Performance of CMS Muon Reconstruction in pp Collision Events at $\sqrt{s} = 7$ TeV
CMS Collaboration (Serguei Chatrchyan (Yerevan Phys. Inst.) et al.)
JINST 7 (2012) P10002
- Determination of Jet Energy Calibration and Transverse Momentum Resolution in CMS
CMS Collaboration (Serguei Chatrchyan (Yerevan Phys. Inst.) et al.)
JINST 6 (2011) P11002