

TULIKA BOSE

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Education:

- Columbia University, USA, Experimental Particle Physics, Ph.D. (2006).
- Cambridge University, U.K., Natural Sciences Tripos, B.A. (1998).
- St. Stephen's College, Delhi University, India, Physics (Honours), B.Sc. (1996).

Professional Appointments:

- Assistant Professor, Physics Department, Boston University (since September 2008)
- Post-doctoral Research Associate, Brown University (2006-2008)
- Graduate Research Assistant, Columbia University (1998-2005)

Awards and Honors: Sloan Research Fellow 2012

Recent Positions of Responsibility:

- Deputy Trigger Coordinator for the Compact Muon Solenoid (CMS) experiment (2011 – present)
- Co-convener of the CMS Electroweak Di-boson (WW, WZ, ZZ) group (2011).
- Co-convener of the CMS Trigger Menu Integration group (2007 – 2011).
- Lead developer and initiator of the CMS Exotica hotline. This is a novel effort designed to create a “hotline” for exotic events (2010 – present).
- Member of the Analysis Review Committee for the analyses “Search for Heavy Stable Charged Particles at CMS” and “A study of single particle response in the CMS calorimeters” (2010 – present).
- Primary editorial contact for the “Commissioning of the CMS High-Level Trigger using cosmic rays” publication (2009 – 2010).
- CMS L1 Trigger liaison for Hadronic Calorimeter Group (2008 – 2010).
- Co-leader of the LHC Physics Center (LPC) Physics Monte Carlo Production group (2006-2007).
- Responsible for maintaining and developing the DØ Level 3 Data Acquisition system (2006-2008).
- On-site coordinator for the DØ Silicon Track Trigger, the leader of the group at DØ responsible for the operation and management of the trigger (2005).

Selected publications:

- CMS Collaboration, “Search for a W boson decaying to a muon and a neutrino in pp collisions at $\sqrt{s} = 7$ TeV”, Physics Letters B 701 (2011) 160179.
- CMS Collaboration, “Search for Heavy Stable Charged Particles in pp collisions at $\sqrt{s} = 7$ TeV”, JHEP 03, 024, 2011.
- CMS Collaboration, “Commissioning of the CMS High-Level Trigger with Cosmic Rays”, JINST 5:T03005,2010.
- CMS Collaboration, “Performance of the CMS Level-1 Trigger during Commissioning with Cosmic Ray Muons”, JINST 5:T03002,2010.
- L. Agostino et al., “Commissioning of the CMS High Level Trigger”, JINST 4:P10005,2009.
- D0 Collaboration, V. M. Abazov *et al.* “Search for Long-Lived Charged Massive Particles with the D0 Detector”, Phys. Rev. Lett. 102, 161802 (2009).
- D0 Collaboration, V. M. Abazov *et al.* (2008)., “Search for W resonances decaying to a top quark and a bottom quark”, Phys. Rev. Lett., 100 (211803).
- D0 Collaboration, V. M. Abazov *et al.* (2006), “Direct Limits on B_s Oscillation Frequency”, Phys. Rev. Lett. , 97 (021802).

Synergistic Activities:

- Peer reviewer for the U.S. Department of Energy.
- Program Committee member and organizer of Particle and Nuclear International Conference (PANIC) 2011.
- Organizer of the “Computing in High Energy Physics Symposium” held during the International Conference of Computational Methods in Sciences and Engineering (ICCMSE 2009) at Rhodes, Greece.
- Panelist at the American Physical Society (APS2011) meeting and at the Meeting of the Division of Particles and Fields of the American Physical Society (DPF2011) on forums discussing issues related to women in physics and experiences and issues facing young physicists in the international arena.
- Interact with journalists and science writers to help disseminate information about high energy physics research to a broader audience (2006–Present).
BBC interview during the startup of the LHC 7 TeV run (March 30th, 2010): http://www.bbc.co.uk/worldservice/news/2010/03/100330_mcgrath_bose1_nh_sl.shtml;
Interview and Symmetry magazine article: <http://www.symmetrymagazine.org/breaking/2010/06/24/cms-exotica-hotline-leads-hunt-for-exotic-particles/>;
Fermilab Today CMS Result of the month article: http://www.fnal.gov/pub/today/archive_2011/today11-08-12_HeavyCousinsReadMore.html;
- Undergraduate and graduate student mentorship at Boston University (2008 – present): help organize and participate in activities coordinated through the Undergraduate Physics Society and the Women in Science and Engineering society and provide mentorship to students.