#### ANDREW BRANDT, PH.D.

### UNIVERSITY OF TEXAS AT ARLINGTON

## A. Education and Training:

College of William and Mary	Physics, Economics	B.S., 1985
University of California, Los Angeles	Physics	M.S., 1988
University of California, Los Angeles	Physics	Ph.D., 1992
Fermi National Accelerator Laboratory	Postdoctoral Fellow	1992-1995
Fermi National Accelerator Laboratory	Wilson Fellow	1996-1999

#### **B.** Research and Professional Experience:

2010 – Professor, The University of Texas at Arlington, Texas
2004-2010 Associate Professor, The University of Texas at Arlington, Texas
1999-2004 Assistant Professor, The University of Texas at Arlington, Texas

# C. Publications related to the proposed project:

- 1. ``Search for charged Higgs bosons decaying via  $H^+ \to \tau \nu$  in fully hadronic final states using pp collision data at  $\sqrt{s} = 8$  TeV, with the ATLAS detector," (ATLAS Collaboration), JHEP03 88 (2015); arxiv:1412.6663."
- 2. "Search for charged Higgs bosons produced in association with a top quark and decaying via  $H^+ \rightarrow \tau \nu$  using pp collision data recorded at  $\sqrt{s} = 13$  TeV by the ATLAS detector, Phys. Lett. B 759 (2016) 555-574, arxiv:1603.09203.
- 3. "Expected Performance of the ATLAS Experiment: Detector Trigger and Physics," ATLAS Collaboration, arXiv:0901.0512 CERN-OPEN-2008-020. ISBN: 978-92-9083-321-5.
- 4. "Expected pileup values at the HL-LHC," ATL-UPGRADE-PUB-2013-014.
- 5. "The FP420 R&D Project: Higgs and New Physics with Forward Protons at the LHC," FP42Collaboration, arXiv:0806.0302v2 [hep-ex]; J. Inst.: 2009\_JINST\_4\_T10001. "A Forward Proton Detector at DZero," A. Brandt *et al.*, Fermilab Proposal P-900, FERMILAB-PUB-97-377.
- 6. ``Letter of Intent for the Phase-I Upgrade of the ATLAS Experiment," CERN-LHCC-2011-012 LHCC-I-020; <a href="https://cds.cern.ch/record/1402470">https://cds.cern.ch/record/1402470</a>
- 7. "A Particle Consistent with the Higgs Boson Observed with the ATLAS Detector at the Large Hadron Collider", Science 338 (2012) 1576-1582"
- 8. "Design of Cherenkov bars for optical part of Time-of-flight detector in Geant 4," A.Brandt, L. Nozka; Optics Express. <a href="http://www.opticsinfobase.org/oe/upcomingissue.cfm">http://www.opticsinfobase.org/oe/upcomingissue.cfm</a>
- 9. ``Charged-particle multiplicities in pp interactions measured with the ATLAS detector at the LHC," New J. Phys. 13 053033 (2011); CERN-PH-EP-2010-079; arXiv:1012.5104.
- 10. "Search for the Standard Model Higgs Boson in Tau Lepton Pair Final States" V. M. Abazov et al. (D0 Collaboration), Phys. Rev. D 88, 052005;arXiv:1203.4443.

# **D.** Synergistic Activities:

- 1. Established and led ATLAS Trigger Rates Group (2008-2010)
- 2. U.S ATLAS L2 Manager for AFP in Phase 1 Upgrade CD-0 (2012-2013)
- 3. Supervised grad students on Diffractive Higgs, SM Higgs, and post-doc on charged Higgs (2010-2016)
- 4. Spokesman of T958, Fermilab Test Beam Experiment on picosecond timing (2006-2015)
- 5. Proposed, initiated, and led DZero Forward Proton Detector group (1996-2006)

### E. Collaborators and Other Affiliations

**Collaborators: ATLAS Collaboration,** Hal Evans (Indiana), Elliot Lipeles (Penn), Mark Oreglia (Chicago), Michael Reeijjsenbeek (Stony Brook)

## **Graduate and Postdoctoral Advisors:**

Graduate – H. Montgomery (Jefferson Lab) Postdoctoral – P. Schlein (UCLA, deceased)

### Thesis Advisor and Postgraduate-Scholar Sponsor:

### *Past graduate students:*

Michael Strang (Ph.D. Physics, 2005) Ohio State; Pedro Duarte (M.Sc. Physics, 2007) Data Engineer Altx, Berkeley, CA; Arnab Pal (Ph.D. Physics, 2013) Ninah Consulting, Gurgaon, India; Ian Howley (Ph.D. Physics, 2013) NASA Marshal Space Flight Center.

## Post-doctoral Fellows:

Christophe Royon (2000-2002) Kansas, Pierrick Hanlet (2001-2002) Illinois Institute of Technology, Duncan Brown (2004-2007) Fermilab, Edward Sarkisyan-Grinbaum (2008-2012) CERN, Justin Griffiths (2013-) UTA