

Biographical Sketch: Daniel Cronin-Hennessy

Academic Preparation:

Boston College	Physics	B.S. 1990
Duke University	Physics	M.S. 1993
Duke University	Physics	Ph.D. 1997
Duke University	Research Associate	1997 - 1998
University of Rochester	Research Associate	1999-04

Professional Experience:

2010-Present: **Associate Professor of Physics**, University of Minnesota

- Experiments: MINOS(neutrino), $NO\nu A$ (neutrino), CLEO-c (HF), BESIII (HF),
- D Meson Reconstruction Oversight Committee Chair (BESIII , 2012-present)
- Charm Analysis Group Convener (BESIII , 2011)
- Assistant Level 2 Manager of Module Factory ($NO\nu A$, 2010-present)
- Level 3 Manager of Quality Assurance ($NO\nu A$, 2010-present)
- Convener for Snowmass (2013): Communication, Education and Outreach
- Co-author of "Fundamental Physics at the Intensity Frontier" [97]

2004-2010: **Assistant Professor of Physics**, University of Minnesota

- Experiments: MINOS(neutrino), $NO\nu A$ (neutrino),CLEO-c (HF), BESIII (HF)
- Simulations Manager (MINOS, 2008-2010)
- Operations and Shift Committee (BESIII , 2008-2009)
- Assistant Level 2 Manager of Module Factory ($NO\nu A$, 2008-2010)
- Level 3 Manager of Quality Assurance ($NO\nu A$, 2007-2010)
- Sloan Fellow (2006-2010)

1999-2004: **Research Associate**, University of Rochester

- Experiments: CLEOII.V (HF) and CLEO-c (HF)
- Analysis Coordinator (CLEO-c, 2004)
- Operations Manager (CLEO-c, 2003)
- Chair of B Physics Group (CLEO-c, 2001)

1997-1998: **Research Associate**, Duke University (CDF)

Awards:

- Taylor Career Development Award (2010)
- Sloan Fellowship Award (2006)

Selected Publications:

1. *Branching Fraction and Photon Energy Spectrum for $b \rightarrow s\gamma$* , (S. Chen et al.) Physical Review Letters 87:251807, 2001.
2. Two photon widths of the χ_{c20} and helicity analysis of χ_{c2} , (M. Ablikim et al.), Submitted to Phys.Rev.D
3. *Hadronic Mass Moments in Inclusive Semileptonic B Meson Decays*, (D. Cronin-Hennessy et al.) Physical Review Letters 87:251808, 2001.
4. *Comparison of $D \rightarrow K_S\pi$ and $K_L\pi$ Decay Rates*, (Q. He et al.) Physical Review Letters 100:091801, 2008

5. *Absolute Branching Fraction Measurements for Exclusive D_s Semileptonic Decays*, (S.B. Athar et al.) Phys.Rev.D80:052007, 2009
6. *Measurement of Neutrino Mass Splitting and flavor mixing by MINOS*, (P. Adamson et al.), Phys.Rev.Lett.106.181801(2011)
7. *First direct observation of muon anti-neutrino disappearance*, (P. Adamson et al.), Phys.Rev.Lett.107.021801(2011)
8. *Improved search for muon-neutrino to electron-neutrino oscillations in MINOS*, (P. Adamson et al.), Phys.Rev.Lett.107.181802(2011)
9. *Search for CP and P Violating Pseudoscalar Decays into $\pi\pi$* , (M. Ablikim et al.), Phys.Rev.D84:032006 (2011)
10. *Improved measurement of muon antineutrino disappearance in MINOS*, (P. Adamson et al.), Phys.Rev.Lett.108.191801(2012)

Collaborations

2004-Present: NO ν A (NuMI Off-Axis electron-Neutrino Appearance)

2004-2013: MINOS (Main Injector Neutrino Oscillation Search)

2008-2013 BESIII (Beijing Electron Spectrometer)

1999-2013: CLEO

1993-1999: CDF (Collider Detector at Fermilab)

Synergistic Activities:

- Chair of Local Organizing Committee for Snowmass (CSS2013, 2012-2013)
- PI and Lead Faculty Mentor for QuarkNet at Minnesota (2004-present)
- Organizer of Masterclass at Minnesota (2004-Present)
- Co-organizer and host of three NO ν A collaboration meetings at Minnesota
- Local organizing committee, CIPANP, 2009
- Twenty-two undergraduate research projects associated with ongoing experiments through REU, UROP or other support. These were primarily NO ν A detector research and development projects. (14 NO ν A projects, 4 BES projects, 2 MINOS analysis projects, 2 CLEO analysis projects)

Graduate and Postdoctoral Advisors:

Thesis Advisor: T. J. Phillips (Duke University)

Postdoctoral supervisor: E.H. Thorndike (University of Rochester)

Thesis Advisees

Completed: Timothy Klein (CLEO-c)& Matthew Strait (MINOS)

Current: Nicholas Raddatz (NO ν A)& Kanika Sachdev (NO ν A)

Postdoctoral Scholars Sponsored

Dr. Satish Desai (NO ν A), Dr. Zeb Krahn (NO ν A), Dr. Jarek Nowak (NO ν A), Dr. Pete Zweber (BESIII), Dr. Kregg Arms (MINOS),