

## Michael D. Hildreth

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**Education:** Ph.D. 1995 Stanford University (Physics)  
A.B. 1988 Princeton University (Physics)

**Experience:** 2012-Present Professor, University of Notre Dame  
2006-2012 Associate Professor, University of Notre Dame  
2000-2006 Assistant Professor, University of Notre Dame

- Member of the CMS Experiment at CERN.
- CMS Simulation Convener (2010 - Present).
- Contributor to SUSY, Exotica Searches, and Higgs Physics Groups.
- Principle Investigator: Data and Software Preservation for Open Science
- Member of the DØ Experiment at Fermilab.
- Software/Algorithms Coordinator (2005 - 2007).
- Deputy Software/Algorithms Coordinator (2004 - 2005).
- DØ Tracking Group Coordinator (2002-2004, 2007 - 2008).
- DØ Central Fiber Tracker Software Coordinator (2000 - 2010).
- Simulations Coordinator for the DØ Level 1 Trigger Upgrade.
- Contributor to top quark and  $W$  Mass Physics Groups.
- International Linear Collider R&D for Beam Energy Measurements.
- Co-Spokesperson: T-474 Energy Spectrometer Experiment at SLAC.
- Member of ATF2 Collaboration at KEK.
- Fermilab Users' Executive Committee (2009-2010).

1997-1999 Physicist SL/BI-EP/OPAL  
1995-1997 Scientific Associate EP/OPAL  
CERN  
Geneva, Switzerland

- Member of the OPAL collaboration at LEP.
- Member of the Accelerator Beam Instrumentation Group.
- Originator/Coordinator of LEP Spectrometer Project.
- Member of the LEP Energy working group.
- Expert on effects of LEP RF system on beam energy.
- Member of the OPAL and LEP Heavy Flavor Electroweak working groups.

**Experience:** *(continued)*

1988-1995            Research Assistant            Experimental Groups E and I  
Stanford Linear Accelerator Center  
Stanford University  
Stanford, CA 94309

- *Doctoral Dissertation:* Studies of the Strong and Electroweak Interactions at the  $Z^0$  pole.
- Member of the SLD collaboration at the Stanford Linear Collider (SLC).
- Expert on backgrounds optimisation for collider running.
- Member of SLD Heavy Quark and QCD working groups.
- Co-founder of SLD Charm Physics working group.
- Member of Next Linear Collider Physics and Detector working groups.
- Member of the Mark II/SLC Upgrade Collaboration.
- 9 quarters of award-winning physics teaching.

1986-1988            Undergraduate Research        High Energy Physics Group  
Assistant                            Department of Physics  
Princeton University  
Princeton, NJ 08544

- Member of the E787 rare kaon decay experiment at Brookhaven National Laboratory.
- *Senior Thesis:* Weak Neutral Currents: a Search for the Process  $K^+ \rightarrow \pi^+ \mu^+ \mu^-$ .
- Attended 1987 U.S. Particle Accelerator School, Fermilab.

**Fellowships:** 2013            Senior Fellow, LHC Physics Center, Fermi National Laboratory  
2010-2011            Guest Scientist, Fermi National Laboratory  
2005-2006            Guest Scientist, Fermi National Laboratory

**Awards:**            *Thomas P. Madden Award as the Outstanding First Year Instructor*, Notre Dame (2010)  
*Rev. Joyce Award for Excellence in Undergraduate Teaching*, Notre Dame (2008)  
*Cottrell Scholar*, Research Corporation (2003)  
*Outstanding Junior Investigator*, U.S. Department of Energy (2002)  
*The Paul H. Kirkpatrick Award for Excellence in Teaching and Research*  
Physics Dept., Stanford University (1991).  
*Centennial Teaching Assistant*  
Physics Dept., Stanford University (1990).  
*The Allen G. Shenstone Prize for Excellence in Experimental Physics*  
Thesis Prize, Physics Dept., Princeton University (1988).

**Affiliations:** Sigma Xi, Sigma Pi Sigma, American Physical Society

## Departmental Activities:

### Departmental Committees:

1. Chair of Undergraduate Recruitment ('01-'04), Member '05
2. Chair of Computing ('04-'08, '11)
3. Chair of Laboratory and Demonstration Equipment ('04-'09), Member '11)
4. Publications ('04)
5. Long Range Planning ('04-'05, '09-'10)
6. Physics Teaching ('10-present, Chair 2013-2014)
7. Graduate Recruitment ('00, '01)
8. Graduate Admissions (2013)
9. Committee on Appointments and Promotions (2013-2014)

TA Training Workshop Coordinator ('01-'13)

Physics Notre Dame Class of 2012 Advisor ('09-present)

## University Activities:

### University Committees:

1. TLTR Steering Committee ('01, '02)
2. TLTR Roundtable on Faculty Development ('00, '01)
3. College of Science Computing Committee ('00-'10, Chair '11)
4. College of Science Jordan Hall Committee ('04-'06)
5. University Council for Academic Technologies ('06-present)

Kaneb Center Fellow for International Teaching Assistants ('02, '03)

## Postdoctoral Researchers:

2000 – 2002	Avtandyl S. Kharchilava (Faculty, SUNY Buffalo)
2003 – 2005	Oana Boeriu (Faculty, University of the Witwatersrand, S.A.)
2006 – 2011	Kwok Ming (Leo) Chan

## Graduate Students:

2001 – 2008	David Lam (Financial industry)
2003 – 2010	Jyotsna Osta (Postdoc, Fermilab)
2007 – 2013	David Morse (Postdoc, Northeastern University)
2008 – 2013	Nil Valls-Velasco (engineering firm)
2011 – present	Matthias Wolf
2013 – present	Allison Reinsvold

## Notre Dame Undergraduate Student Researchers:

2001 – 2003	Ken Herner (Honors Thesis) (postdoc, Univ. of Michigan)
2001 – 2002	Frank Golf (U.C. San Diego)
2003 – 2004	Patrick Mickel (Florida)
2003 – 2005	Ken Henisey (U.C. Santa Barbara)
2004 – 2006	Michael Albrecht (Notre Dame)
2006 – 2009	Nicholas Battafarano (Creighton)
2006 – 2009	Matthew Lucia (Honors Thesis) (Princeton)
2006 – 2009	Andrew Kobach (Northwestern)
2006 – 2009	Zachary Liptak (U. Texas Austin)

2007– 2009	Thomas Rehagen (Honors Thesis) (U.C.L.A.)
2009– 2010	Kurt Jung (Purdue)
2009– 2010	Alexander Kocurek (U.C. Berkeley)
2010– 2013	Kevin McDermott (Honors Thesis) (Cornell), Shannon Hughes (ND Law), Kevin Kelly (Northwestern)
2011–2013	Zachary Harris (Texas A&M Engineering), Stanislava Sevova (Northwestern), Rachael Creager (ND ‘14)
2013–present	Jason Seroni (ND ‘16), Ryan Cain (ND ‘15), Chris Barnes (ND ‘15), Jeff Adams (ND ‘15)

**REU Students:**

Summer 2001	Janessa Bechtel
Summer 2003	Frank Golf, Ken Herner
Summer 2004	Ken Henisey, Jennifer Kaley
Summer 2005	Michael Albrecht, Matthew Meixner
Summer 2006	Michael Albrecht, Justin Pilot, Matthew Lucia, Nicholas Battafarano
Summer 2007	Andrew Kobach, Nicholas Battafarano
Summer 2008	A.J. McGauley, Matthew Lucia, Thomas Rehagen, Zachary Liptak
Summer 2009	Andrew Kobach, Mickey McDonald, Kurt Jung
Summer 2010	Alexander Kocurek
Summer 2011	Stanislava Sevova, John Hardin, Kevin McDermott
Summer 2012	Rachael Creager, Michael Swift , Zachary Harris
Summer 2013	Edward Varty