

# Peter M. Gerdes

## *Curriculum Vitae*

**Contact**            255 Hurley  
Department of Mathematics  
University of Notre Dame du Lac  
Notre Dame, Indiana 46556  
  
Email: gerdes@invariant.org  
  
Web: <http://www.invariant.org/>

## Research Interests

Computability theory with an emphasis on implicit definability and automorphisms of the c.e. sets.

**Education**            *Ph.D., Group in Logic and Methodology of Science*, Fall 2008  
University of California, Berkeley  
Berkeley, CA  
Thesis: *Moduli of Computation*  
Adviser: Prof. Leo A. Harrington  
  
*B.S., Mathematics* (with honor), Spring 2001  
California Institute of Technology  
Pasadena, CA

**Work**                Visiting Assistant Professor (Postdoc), 2008-2011  
Mathematics Department  
University of Notre Dame du Lac  
Notre Dame, IN 46556

## Publications

- [1] Peter Cholak, Peter Gerdes, and Karen Lange, *On  $n$ -tardy sets*, Submitted (2010), 38.
- [2] Su Gao and Peter M. Gerdes, *Computationally enumerable equivalence relations*, *Studia Logica* **67** (2001), no. 1, 27–59. MR 1833652
- [3] Peter M. Gerdes, *A  $\omega$ -rea set forming a minimal pair with  $0'$* , Submitted (2010), 11.
- [4] ———, *Harrington's solution to McLaughlin's conjecture and non-uniform self-moduli*, Submitted (2010), 27.

## Presentations

*A  $\omega$ -REA Set Forming A Minimal Pair With  $0'$* , September 2010, Midwest Computability Seminar

*n-Tardy Sets*, July 2009, Computability in Europe

*Computable in Every Majorizing Function*, November 2008, Midwest Computability Seminar

*Uniformly Computable in Every Faster Growing Function*, October 2008, AMS Eastern Sectional

*Sets With A Non-Uniform Self-Modulus*, January 2008, ASL Winter Meeting.

*Sets With A Self-Modulus Bounding No Non-Recursive  $\Delta^0_\alpha$  Set*, April 2007, Graduate Student Conference In Logic.

Comments in response to *Belief and Beyond: Toward a New Orientation in Epistemology*, May 2005, Formal Epistemology Workshop.

## Service

Organizer (with K. Lange and P. Cholak) of Special Session on Computability and Its Applications at the AMS 2010 Fall Central Sectional Meeting.

Refereed papers for The Journal of Symbolic Logic and Proceedings of the American Mathematical Society

## Teaching Experience

### Teaching Assistant

2006-07	“Analytic Geometry and Calculus”
2005-06	“Philosophy of Science”
2004-05	“Introduction to Logic”
2002-04	“Calculus” and “Linear Algebra”

### Instructor

2008 Fall	“Calculus B”
2009 Fall	“Calculus III”
2009 Spring	“Probability and Statistics”
2010 Spring	“Topics in Logic” (covering higher recursion theory)
2010 Fall	“Calculus III”

December 15, 2010