

CURRICULUM VITAE

Ivo Herzog

DEGREES

1989	Ph.D.	Mathematics	University of Notre Dame
1987	M.S.	Mathematics	Yale University
1982	B.A.	Mathematics	Oberlin College

APPOINTMENTS

Sept 2007 - June 2008	Visiting Prof	Yonsei U, Seoul
April 2007- June 2007	Visiting Scholar	CRM, Barcelona
Sept 2001 - August 2007	Associate Prof	Ohio State U, Lima
April 2007- June 2007	Visiting Scholar	U Claude Bernard, Lyon
Sept 1999 - June 2001	Assist Prof	Ohio State U, Lima
Sept 1997 - June 1999	Visiting Assist Prof	Ohio State U, Lima, USA
Aug 1995 - May 1997	Visiting Assist Prof	U of Notre Dame
July 1989 - June 1991	Irvine Visiting Assist Prof	U of California, Irvine

FELLOWSHIPS AND GRANTS

July 2005 - June 2008	NSF Research Grant DMS 05 - 01207 (USA)
July 2007	INDAM-GNSAGA Research Grant, U of Camerino (ITALY)
July 2002 - June 2005	NSF Research Grant DMS 02 - 00698 (USA)
July 1999 - June 2002	NSF Research Grant DMS 99 - 72613 (USA)
July 1996 - June 1999	NSF Research Grant DMS 96 - 26708 (USA)
Mar 1994 - Aug 1995	AvHumboldt Research Fellowship, U Freiburg (GERMANY)
July 1991 - Aug 1993	NSF Postdoctoral Fellowship, Brandeis University (USA)
Aug 1990 - Sept 1990	SERC Research Grant, U of Manchester (ENGLAND)

PUBLICATIONS

1. (with Ph. Rothmaler) Modules with regular generic types I-III, in *Model Theory of Groups, Proceedings of the Notre Dame Logic Year*, H.A. Nesin and A. Pillay, eds., University of Notre Dame Press (1988), 138-176.
2. Modules with few types, *J of Alg* **142** (2) (1989), 358-370.
3. (with Ph. Rothmaler) Modules with generic types IV, *J of Sym Logic* **57** (1) (1992), 193-199.
4. The Auslander-Reiten Translate, in *Abelian Groups and Noncommutative Rings, A Collection of Papers in Memory of Robert B. Warfield, Jr.*, *Contemp Math* **130** (1992), 153-165.
5. Elementary duality of modules, *Trans of the American Math Soc* **340** (1) (Nov. 1993), 37-69.
6. Finitely presented right modules over a left pure-semisimple ring, *Bull of the London Math Soc* **26** (1994), 333-338.
7. A test for finite representation type, *J of Pure and Appl Alg* **95** (1994), 151-182.
8. (with P. Eklof) Model theory of modules over a serial ring, *Annals of Pure and Appl Logic* **72** (1995), 145-176.
9. (with V.A. Puninskaya) Model theory of divisible modules over a domain, *Fund and Appl Math* **2** (2) (1996), 563-594, in Russian.
10. The Ziegler spectrum of a locally coherent Grothendieck category, *Proc of the London Math Soc* **74** (3) (1997), 503-558.
11. (with Ph. Rothmaler) On the definition of stability, preprint, 3 pages.
12. Model theory of modules. In *Logic Colloquium 95, Proceedings of the Annual European ASL Summer Meeting, Haifa*, V. Harnik and J. Makowsky, eds., North-Holland, Amsterdam (1997), 66-72.
13. The endomorphism ring of a localized coherent functor, *J of Alg* **191** (1997), 416-426.
14. (with E.E. Enochs) A Homotopy of quiver morphisms with applications to representations, *J canadien de maths*, **51** (2) (1999), 294-308.
15. (with E.E. Enochs and S. Park) Cyclic quiver rings and polycyclic-by-finite group rings, *Houston J of Math* **25** (1) (1999), 1-13.
16. Locally simple objects, In *Proceedings of the International Conference on Abelian Groups and Modules, Dublin*, P. Eklof and R. Göbel, eds., Trends in Mathematics Series, Birkhäuser Verlag, Basel (1999), 341-351.
17. Pseudo-finite dimensional representations of $sl(2, k)$, *Selecta mathematica, New series* **7** (2001), 241-290.
18. Pure-injective envelopes, *J of Alg and Its Appl* **2**(4) (2003), 397-402.
19. (with P.A. Guil Asensio) Left cotorsion rings, *Bull of the London Math Soc* **36** (2004), 303-309.
20. Finite matrix topologies, *J of Algebra* **282** (2004), 157-171.
21. (with P.A. Guil Asensio) Sigma-cotorsion rings, *Adv in Math* **191**(1) (2005), 11-28.
22. Applications of duality to the pure-injective envelope, *Alg and Rep Th* **10**(2)(April 2007), 135-155.
23. (with P.A. Guil Asensio) Model-theoretic aspects of Σ -cotorsion modules, *Annals of Pure and Applied Logic* **146**(1) (April 2007), 1-12.
24. (with P.A. Guil Asensio) Indecomposable flat cotorsion modules, *J of the London Math Soc* **76** (2007), 797-811.

25. (with P.A. Guil Asensio) Pure-injectivity in the category of flat modules, in *Algebra and Its Applications*, Contemporary Math **419** (2006), 155-166.
26. Contravariant functors on the category of finitely presented modules, Israel J of Math, to appear.
27. The phantom cover of a module, Adv in Math **215**(1) (Oct 2007), 220-249.
28. (with V. Camillo and P.P. Nielsen) Non-self-injective injective hulls with compatible multiplication, J of Algebra **314**(1) (August 2007), 471-478.
29. (with Ph. Rothmaler) Pure projective approximations, Math Proc of the Cambridge Phil Soc., to appear.
30. (with S. L'Innocente) The nonstandard quantum plane, J of Pure and Appl Logic, to appear.
31. (with Ph. Rothmaler) When cotorsion modules are pure injective, submitted.

INVITED LECTURES

- CONFERENCES:** Sp. Session in Model Theory, ASL Meeting, Chicago, 1989
 Midwest Model Theory Conference, University of Wisconsin, Madison, 1991
 MAMLS Meeting, RUTGERS, 1992
 Sp. Session in Model Theory, AMS-ASL, San Antonio, 1993
 Model Theory and Rep. Theory of Finite Dimensional Algebras, Bielefeld, 1993
 Algebra and Logic Conference, Essen, 1994
 Algebra and Differential Equations Winter School, Moscow, 1995
 50. Arbeitstagung Allgemeine Algebra, Darmstadt, 1995
 Logic Colloquium 1995, Haifa, 1995
 Midwest Model Theory Conference, Notre Dame, 1995
 Workshop on Purity in Representation Theory, Bielefeld, 1996
 Sp. Session in Ring Theory, AMS-SMM, Oaxaca, 1997
 Ring Theory Session, Denison Conference, Granville, 1998
 Sp. Session in Ring Theory, AMS-SMM, Denton, 1999
 Modellthorietagung, Oberwohlfach, 2000
 Representation Theory of Algebras, Northeastern University, 2000
 Sp. Session in Model Theory, AMS-ASL, New Orleans, 2001
 Sp. Session in Rings and Modules, AMS, Columbus, 2001
 Ring Theory Session, Denison Conference, Granville, 2002
 Midwest Model Theory Conference, Notre Dame (Indiana), 2002
 Sp. Session in Quivers and their Generalizations, AMS, Boston, 2002
 Sp. Session in Ring Theory and Related Topics, AMS-RSME, Sevilla, July 2003
 Ring Theory Session, Denison Conference, Columbus, June 2004
 Algebra and its Applications, Athens (Ohio), March 2005
 New York City Logic, New York, May 2005
 Algebra Day, Ottawa, May 2006
 Non Commutative Algebra, Granada, Sept 2006
 Sp. Session in Model Theory, Canadian MS Summer Conf., Winnipeg, June 2007
 Model Theory and Algebra - MODNET, Camerino, June 2007
 Sp. Session in Logic, Korean MS Semiannual Meeting, You Seong, Oct 2007
 Sp. Session in Set-theoretic Algebra, ASL Meeting, Irvine, March 2008

Sp. Session in Logic, Korean MS Semiannual Meeting, Taegu, April 2008
Sp. Session in Model Theory, Non-classical Logics and Proof Theory, 10th Asian Logic Conference, Kobe, Sept 2008
Model Theory of Fields, Durham, England, July 2009

COLLOQUIA: U. of New Hampshire (1993), U. of Manitoba (1993), Uni Freiburg (1994), U. of Notre Dame (1995), U. of Iowa (1998), Ohio U. (1999), U. of Ottawa (1999), Wesleyan (2000), Ludwig-Maximilians-Universität (2001), Jeon-Buk National U., Jeon-Ju (2002), Bowling Green St. U. (2005), Yonsei U., Seoul (2006)

SEMINARS: Notre Dame (Logic), Kiel (Logic), UC-Irvine (Algebra/Logic), Manchester (Algebra/Logic), Brandeis (Algebra), Wesleyan (Logic), MIT (Logic), Bielefeld (Representation Theory), Toruń (Algebra), Paris VII (Logic), RUTGERS (Logic), Fields Institute (Model theory), Notre Dame (Algebra), Zagreb (Logic), Ohio State (Ring Theory), Ohio Northern (Mathematics), Eastern Washington (Mathematics), Northeastern (Representation Theory), Wesleyan (Algebra), Université Claude Bernard (Logic), Murcia (Algebra), Almeria (Algebra), Dea-Jin U., Pochon (Mathematics), CUNY (Logic), McMaster (Logic), Korean IAS (Representation Theory), Barcelona Autònoma (Algebraic Topology), Barcelona Centrale (Logic), Padova (Algebra), Florence (Logic), Camerino (Logic), Yonsei (Logic)

TEACHING EXPERIENCE

Graduate Courses: First-Year Graduate Algebra sequence (Group Theory, Ring Theory and Galois Theory), First-Year Graduate Logic sequence (Model Theory, Recursion Theory and Set Theory), Model Theory of Modules (Topics), Homological Algebra, Set-Theoretic Forcing.

Undergraduate Courses: Differential Equations, Group Theory, Introduction to Proofs, Calculus, Finite Mathematics, Algebra and Trigonometry.

Independent Studies: Differential Equations, Group Theory, Knot Theory.

REVIEWS

Journals Refereed: Comm in Alg, East-West J, Fund Math, Glasgow Math J, Indiana J of Math, Israel J of Math, J canadien de maths, J of Alg, J of Alg and its Appl, K-Theory, J of Pure and Appl Alg, J of Pure and Appl Logic, J of Sym Logic, Notre Dame J of Formal Logic, Proc of the AMS, Trans of the AMS.

Article Reviews: Mathematical Reviews (regular reviewer), Zentralblatt

Research Proposals Reviewed for: EPSRC (UK), The Levershulme Trust (UK), MZOS (CROATIA), NSA (USA) NSERC (CANADA), NSF (USA)