

# Curriculum Vitae Spartanae

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**Ali Enayat**

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## EDUCATION

- Ph.D. (1984), University of Wisconsin, USA (Dissertation advisor: Kenneth Kunen).
- M.A. (1981), University of Wisconsin, USA.
- B.S. (1979), Iowa State University, USA.

## ACADEMIC EMPLOYMENT

- 2013-present: **Professor of Logic**, Department of Philosophy, Linguistics, and Theory of Science, University of Gothenburg, Sweden.
- 1987-2013: **Professor of Mathematics**, Department of Mathematics and Statistics, American University, Washington, DC, USA.
- 1985-1987: **Assistant Professor**, Department of Mathematics and Computer Science, San Jose State University, California, USA.
- 1984-1985: **Assistant Professor**, Department of Mathematics, Western Illinois University, Macomb, Illinois, USA.

## EDITED PROCEEDINGS

- **Nonstandard Models of Arithmetic and Set Theory**, Proceedings of the AMS special session on *Nonstandard Models* (Baltimore, 2003), edited by A. Enayat and R. Kossak, Contemporary Mathematics, volume 361, American Mathematical Society Publications, Providence, Rhode Island, 2004.
- **Logic in Tehran**, Proceedings of the Tehran Logic Conference (October 2003), edited by A. Enayat, I. Kalantari, and M. Moniri, Association for Symbolic Logic and A.K. Peters, 2006.
- **March 2010 Issue of Annals of Pure and Applied Logic**, Proceedings of the IPM 2007 Conference, edited by A. Enayat and I. Kalantari.
- **Studies in Weak Arithmetics 3**, Proceedings of JAF33 (Gothenburg) & JAF34 (New York), edited by P. Cégielski, A. Enayat, and R. Kossak, CSLI Publications, Palo Alto, 2016.
- **February 2018 Issue of the Archive for Mathematical Logic**, Proceedings of the IPM Conference on Set Theory and Model Theory, 12-16 October 2015), edited by A. Enayat, M. Pourmahdian, & R. Schindler.

## PUBLISHED RESEARCH ARTICLES

1. *The nonmetrizability of uncountable well-ordered spaces* [with A. Abian], **Simon Stevin**, vol. 55, No. 1 (1981), pp. 3-6.
2. *On certain elementary extensions of models of set theory*, **Transactions of American Mathematical Society**, vol. 283, No. 2 (1984), pp. 705-715.
3. *Weakly compact cardinals in models of set theory*, **Journal of Symbolic Logic**, vol. 50, No. 2 (1985), pp. 476-486.
4. *Conservative extensions of models of set theory and generalizations*, **Journal of Symbolic Logic**, vol. 51, No. 4 (1986), pp. 1005-1021.
5. *Undefinable classes and definable elements in models of arithmetic and set theory*, **Proceedings of the American Mathematical Society**, vol. 103, (1988), pp. 1216-1220.
6. *Minimal elementary extensions of models of set theory and arithmetic*, **Archive for Mathematical Logic**, vol. 30 (1990), pp. 181-192.
7. *Analogues of the MacDowell-Specker theorem in set theory*, in **Models, Algebras and Proofs**, edited by X. Caicedo and C.H. Montenegro, Marcel Dekker Inc., 1998. pp. 25-50.
8. *Delta as a continuous function of  $x$  and  $\epsilon$* , **The American Mathematical Monthly**, vol. 107, No. 2 (2000), pp. 151-155.
9. *Trees and Keisler's problem*, **Archive for Mathematical Logic**, vol. 40 (2001), pp. 273-276.
10. *Powerlike models of set theory*, **Journal of Symbolic Logic**, vol. 66, (2001), pp. 1766-1782.
11. *Counting models of set theory*, **Fundamenta Mathematicae**, vol.174 (2002) pp. 23-47.
12. *Automorphisms, Mahlo cardinals, and NFU*, in **Nonstandard Models of Arithmetic and Set Theory**, edited by A. Enayat & R. Kossak, Contemporary Mathematics, vol. 361, AMS Publications, Providence, Rhode Island, 2004, pp. 37-59.
13. *The Leibniz-Mycielski axiom in set theory*, **Fundamenta Mathematicae**, vol. 181 (2004), pp.215-231.
14. *Leibnizian models of set theory*, **Journal of Symbolic Logic**, vol. 69 (2004), pp. 775-789.
15. *Models of set Theory with definable ordinals*, **Archive for Mathematical Logic**, vol. 44 (2005), pp. 363-385.
16. *From bounded to second order arithmetic via automorphisms*, in **Logic in Tehran**, ed.by A. Enayat, I. Kalantari, & M. Moniri, ASL Lectures Notes in Logic, vol. 26, 2006, pp.87-113.
17. *Automorphisms of models of bounded arithmetic*, **Fundamenta Mathematicae**, vol. 192 (2006), pp. 37-65.
18. *Automorphisms of models of arithmetic: a unified view*, **Annals of Pure and Applied Logic**, vol.145, (2007), pp. 16-36.
19. *Model Theory of the regularity and reflection schemes* [with S. Mohsenipour], **Archive for Mathematical Logic**, vol. 47 (2008), pp. 447-464.
20. *A standard model of Peano arithmetic with no conservative elementary extension*, **Annals of Pure and Applied Logic**, vol. 156 (2008), pp. 308-318
21.  *$\omega$ -models of finite set theory* [with J. Schmerl and A. Visser], **Lecture Notes in Logic** vol. 36, Cambridge University Press, 2011, pp. 43-65.
22. *An improper arithmetically closed Borel subalgebra of  $P(\omega)$  mod FIN* [with S. Shelah], **Topology and Its Applications**, vol. 158, 2011, pp. 2495-2502.
23. *A new proof of Tanaka's theorem*, in **New Studies in Weak Arithmetics**, edited by P. Cégielski, C. Cornaros, & C. Dimitracopoulos, CSLI Lectures Notes, No. 211, 2014, pp. 93-102.

24. *Standard models of arithmetic*, **Idées Fixes**, edited by M. Kasá, University of Gothenburg Publications, 2014, pp. 55-64.
25. *New constructions of satisfaction classes* [with A. Visser], **Unifying the Philosophy of Truth**, edited by D. Achourioti, H. Galinon, K. Fujimoto, & J. Martinez Fernández, Springer, 2015, pp. 321-335.
26. *Variations on a Visserian theme*, **Liber Amicorum Alberti, a Tribute to Albert Visser**, edited by J. van Eijk, R. Iemhoff, & J. Joosten, College Publications, London, 2016, pp. 99-110.
27. *Marginalia on a theorem of Woodin* [with R. Blanck], **Journal of Symbolic Logic**, March 2017, pp. 359-374.
28. *Feferman's forays into the foundations of category theory* [with P. Gorbow & Z. McKenzie], in **Feferman on Foundations: Logic, Mathematics, Philosophy**, Outstanding Contributions to Logic Series, edited by W. Sieg & G. Jaeger, Springer Publications, 2017.
29. *Unifying the model theory of first order and second order arithmetic via  $WKL_0^*$*  [with T. L. Wong], **Annals of Pure and Applied Logic**, vol. 30 (2017), pp. 1247-1283.
30. *Largest initial segments pointwise fixed by automorphisms of models of set theory* [with M. Kaufmann & Z. McKenzie], **Archive for Mathematical Logic**, vol. 57, pp. 91-139, 2018.
31. *Iterated ultrapowers for the masses* [with M. Kaufmann & Z. McKenzie], **Archive for Mathematical Logic**, vol. 57, pp 557–576, 2018.
32. *ZFC proves that Ord is not weakly compact for definable classes* [with J. D. Hamkins], **Journal of Symbolic Logic**, vol. 83, 2018.
33. *Fixed-point sets of self-embeddings of models of arithmetic* [with S. Bahrami], **Annals of Pure and Applied Logic**, vol. 169, 2018, pp. 487-513.
34. *Truth, Disjunction, and Induction* [with F. Pakhomov], **Archive for Mathematical Logic**, 2019, <https://doi.org/10.1007/s00153-018-0657-9>
35. *Truth and feasible reducibility* [with M. Łelyk and B. Wcisło], to appear in the **Journal of Symbolic Logic**, <http://de.arxiv.org/pdf/1902.00392.pdf>

## ARTICLES UNDER REVIEW

- *Topological models of arithmetic* [with J.D. Hamkins and B. Wcisło], <https://arxiv.org/pdf/1808.01270.pdf> .
- *Initial self-embeddings of models of set theory* [with Z. McKenzie], <http://front.math.ucdavis.edu/1906.02873>

## CONFERENCE ORGANIZATION 2013-2019

- Chair of the organizing committee for *the 33rd Meeting of JAF* (Journées sur les Arithmétiques Faibles), **University of Gothenburg**, 16-18 June 2014.
- Member of the program committee for the 9th *Scandinavian Logic Symposium*, **Tampere**, 25-27 August, 2015.
- Co-Chair of the organizing committee for *the IPM Conference on Set Theory and Model Theory*, **IPM Research Center**, Tehran, 12-16 October 2015.
- Member of the organizing committee for the *Scandinavian Summer School in Logic*, **Stockholm**, 7-11 August 2017.

- Member of the program committee for the *European Logic Colloquium*, **Stockholm**, 14-20 August, 2017.
- Co-chair of the program & organizing committee for the *10th Scandinavian Logic Symposium*, **University of Gothenburg**, 11-13 June 2018.

## CURRENT EDITORIAL RESPONSIBILITIES

- Associate Editor of the *Bulletin of Iranian Mathematical Society* (Published by Springer).
- Editor of the *Bulletin of Symbolic Logic* (Published by Cambridge University Press)

## DOCTORAL SUPERVISION

- Amir Togha, *On Automorphisms of Structures in Logic and Orderability of Groups in Topology*, Ph.D. awarded by George Washington University (USA), 2004.
- Shahram Mohsenipour, *Elementary End Extensions in Model Theory and Set Theory*, Ph.D. awarded by the Institute for Theoretical Physics and Mathematics (Iran), 2005.
- Rasmus Blanck, *Contributions to the Metamathematics of Arithmetic: Fixed Points, Independence, and Flexibility*, Ph.D. awarded by the University of Gothenburg (Sweden), 2017.
- Paul K. Gorbow, *Self-similarity in the Foundations*, Ph.D. awarded by the University of Gothenburg (Sweden), 2018.
- Saeideh Bahrami, *Self-embeddings of Models of Peano Arithmetic*, Ph.D. awarded by Tarbiat Modares University (Iran), 2018.

## INVITED LECTURES 2013-2019

- *Model theory of arithmetic* (4 lectures), **Scandinavian Spring School**, Nordfjordeid, Norway, 27-31 May 2013.
- *Self-embeddings of models of arithmetic* (2 lectures), **JAF 32**, University of Athens, Greece, 24 & 25 June 2013.
- *Mathematics meets poetry: Omar Khayyam*, **Sy Friedman's Birthday Conference**, Kurt Gödel Research Center, Vienna, Austria, 8 July 2013.
- *A New Proof of Tanaka's Theorem*, **Proof Theory Day in Lisbon**, University of Lisbon, Lisbon, Portugal, 16 July 2013.
- *Borel models of arithmetic and set theory*, **European Set Theory Conference**, Barcelona, Spain, 19 July 2013.
- *Variations on a theme by Friedman*, **Harvey Friedman's Honorary Doctorate Ceremony**, Ghent University, Ghent, Belgium, 5 September, 2013.
- *What can we gain from satisfaction predicates?* **Seminar in Mathematical Logic and its Applications**, Shahid Beheshti University, Tehran, Iran, 18 December 2013.
- *Interpretations and mathematical logic*, **Frontiers of Mathematics 2**, Sharif University, Tehran, Iran, 25 December 2013. *Tarskian satisfaction classes, revisited*, **Logic Seminar**, Stanford University, USA, 17 March 2014.
- *Tarskian satisfaction classes, revisited*, **Proof Theory, Modal Logic, and Reflection Principles**, Instituto Tecnológico Autónomo de México (ITAM), Mexico City, Mexico, 1 October 2014.

- *Flexible Turing machines*, **Frontiers of Mathematics 3**, IPM, Tehran, Iran, 25 December 2014.
- *Interpretations: a logician's report*, **Gothenburg Philosophical Association**, 6 January 2015.
- *Flexible Turing machines*, **Logic Colloquium**, Kurt Gödel Research Center, Vienna, Austria, 7 May 2015.
- *Visser's categorical lens*, **Albert Visser Meeting**, Utrecht University, Utrecht, the Netherlands, 22 April 2016.
- *Playing with fire: interpreting PA with a full satisfaction predicate within PA*, **JAF 35**, University of Lisbon, Portugal, 6 May 2016.
- *Compositional truth: conservativity, interpretability, and feasibility*, **Workshop on Formal Truth Theories**, University of Warsaw, Warsaw, Poland, 30 September, 2017.
- *The Tarski boundary: a cartographic report*, **Philosophy and Logic. In honor of Cezary Cieśliński**, University of Warsaw, 23 March, 2019.