# Curriculum Vitae

## Leila Khatami

#### **Contact Information**

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# **Employment/Visiting Positions**

Professor of Mathematics, Union College	2020-present
Associate Professor of Mathematics, Union College	2015 - 2020
Assistant Professor of Mathematics, Union College	2011 - 2015
Postdoctoral Associate, Northeastern University	2008 - 2011
Visiting Scholar, Harvard University	2007 - 2008
Postdoctoral fellow, ICTP, Trieste, Italy	2004 - 2005
Maître de conférences invitée, Université Paris 7	June – July 2004
Assistant Professor of Mathematics, Sharif University of Technology	2003 - 2004

#### Education

University of Tehran, Tehran, Iran

Ph.D. in Mathematics, 2003

M.Sc. in Mathematics, 1999

Sharif University of Technology, Tehran, Iran B.Sc. in Mathematics, 1997

#### Research

#### Peer-Reviewed Research Publications:

- 1. Complete intersection Jordan type in height two, (with N. Altafi, and A. Iarrobino), J. Algebra 557 (2020), 224–277.
- 2. Nilpotent matrices having a given Jordan type as maximum commuting nilpotent orbit, (with A. Iarrobino, B. Van Steirteghem, and R. Zhao), *Linear Algebra Appl.* **546** (2018), 210–260.
- 3. The smallest part of the generic partition of the nilpotent commutator of a nilpotent matrix, J. Pure Appl. Algebra 218 (2014), 1496-1516.
- 4. The poset of the nilpotent commutator of a nilpotent matrix, *Linear Algebra Appl.* **439** (2013), no. 12, 3763–3776.

- 5. Bound on the Jordan type of a generic nilpotent matrix commuting with a given matrix (with A. Iarrobino), J. Algebraic Combin. 38 (2013), no. 4, 947–972.
- 6. Commuting nilpotent matrices and Artinian algebras (with R. Basili and A. Iarrobino), *J. Commut. Algebra* 2, (2010), no. 3, 295–325.
- 7. Finiteness of Gorenstein injective dimension of modules (with M. Tousi and S. Yassemi), *Proc. Amer. Soc.* **137** (2009), no. 7, 2201–2207.
- 8. A Bass formula for Gorenstein injective dimension (with S. Yassemi), *Comm. Algebra* **35** (2007), no. 6, 1882–1889.
- 9. Cohen-Macaulayness of tensor products (with S. Yassemi), *Rocky Mountain J. Math.* **34** (2004), no. 1, 205–213.
- 10. Gorenstein injective and flat dimensions under base change (with S. Yassemi), *Comm. Algebra* **31** (2003), no. 2, 991–1005.
- 11. A generalization of the grade of a module (with T. Sharif and S. Yassemi), *Algebra Colloq.* **9** (2002), no. 3, 265–270.
- 12. Associated primes of generalized local cohomology modules (with T. Sharif and S. Yassemi), *Comm. Algebra* **30** (2002), no. 1, 327–330.
- 13. Grade and Gorenstein dimension (with T. Sharif and S. Yassemi), *Comm. Algebra* **29** (2001), no. 11, 5085–5094.

### Preprints and on-going projects:

- Jordan types for graded Artinian algebras in height two, (with N. Altafi, A. Iarrobino, and J. Yaméogo), arXiv:2006.11794v1, Preprint 2020.
- Loci of nilpotent matrices having a given Jordan type as maximum commuting orbit, (with M. Boij, A. Iarrobino, and B. Van Steirteghem), In preparation.

#### Selected Talks:

- Lefschetz Properties in Algebra, Geometry and Combinatorics II, Centre International de Rencontres Mathématiques, Marseille, France, October 2019.
- Lefschetz Properties in Algebra, Geometry and Combinatorics, Institut Mittag-Leffler, Djursholm, Sweden. July 2017.
- Lefschetz Properties and Artinian Algebras Workshop, Banff International Research Station, Banff, Alberta, Canada. March 2016.
- AMS-AWM Special Session on Commutative Algebra, 2016 Joint Mathematics Meetings, Seattle, Washington, USA. January 2016.
- Special Session on Commutative Algebra, AMS Eastern Sectional Meeting, Rutgers University, New Brunswick, New Jersey, USA. November 2015.

- International Conference in Homological Algebra, University of Kentucky, Lexington, KY, USA. July 2015.
- Special Session on Algebra and Representation Theory, AMS Eastern Sectional Meeting, Georgetown University, Georgetown, Washington, DC, USA. March 2015.
- The Graduate Center, The City University of New York, NY, USA. December 2014.
- University at Albany, Albany, NY, USA, May 2014.
- Tufts University, Boston, MA, USA, December 2013.
- Siena College, Loudonville, NY, USA, December 2013.
- Northeastern University, Boston, MA, USA. February 2013.
- Workshop on Representation Theory, Homological Algebra, and Free Resolutions, MSRI, Berkeley, CA, USA. February 2013.
- Workshop on Aspects of Strong and Weak Lefschetz Properties, Honolulu, HI, USA. September 2012.
- Smith College, Northampton, MA, USA. April 2012.
- Reed College, Portland, OR, USA. December 2011.
- Special Session on Lie Algebras, Algebraic Transformations Groups and Representation Theory, AMS Western Sectional Meeting, University of Nevada, Las Vegas, USA. April 30-May 1, 2011.
- The Graduate Center, The City University of New York, NY, USA. October 2009.
- Special Session on Commutative Algebra and Applications to Algebraic Geometry, AMS Eastern Sectional Meeting, Pennsylvania State University, State College, PA, USA. October 2009.
- University of Nebraska-Lincoln, NE, USA. May 2009.

#### Invited/Supported Workshop Attendance:

- Lefschetz Properties in Algebra, Geometry and Combinatorics (hybrid meeting), Mathematical Research Institute of Oberwolfach, September 2020.
- Lefschetz Properties and Jordan Type in Algebra, Geometry and Combinatorics, Levico Terme, Italy, June 2018.
- Joint Introductory Workshop: Cluster Algebras and Commutative Algebra, MSRI, Berkeley, CA, USA. August-September 2012.
- Connections For Women: Joint Workshop on Commutative Algebra and Cluster Algebras, MSRI, Berkeley, CA, USA. August 2012.
- Components of Hilbert Schemes, American Institute of Mathematics, Palo Alto, CA, USA. July 2010.