

CURRICULUM VITAE

Name: Itamar Stein

Date & place of birth: March 11, 1988, Tel-Aviv, Israel.

Citizenship: Israeli, Italian

Date of arrival to Israel: X

Marital status: Married +3.

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Residence address: 5 Shimoon Vizental St., Petach Tikva 49275, Israel.

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Military service: 2007-2012 Software developer in the technology division of the Ministry of Defense (Sergeant first class).

1. Academic education

2013-2017 Ph.D. in Mathematics. Bar-Ilan University, Israel. Dissertation title: Quivers and global dimension of monoid algebras. Adviser: Prof. Margolis, S.

2009-2012 M.Sc. (Summa cum Laude) in Mathematics. Bar-Ilan University, Israel. Dissertation title: Graded monoids and graded monoid presentations. Adviser: Prof. Margolis S.

2004-2007 B.Sc. (Summa cum Laude) in Mathematics. Bar-Ilan University, Israel.

2. Academic employment

2017 – present Lecturer. Mathematics unit. Shamoon College of Engineering.

2017 Junior Lecturer. Mathematics Department. Bar-Ilan University, Israel.

2013-2017 Teaching assistant. Mathematics Department. Bar-Ilan University, Israel.

3. Industrial engineering experience

2007-2012 Software developer. Ministry of Defense, Israel. Specialization in communication systems.

4. Academic research and development activities

4.1. Previous research and development activities

2016 Algebraic combinatorics: Representation theory of finite groups. Branching rules. (1 paper)

2011-2013 Theoretical computer science: String rewriting systems. Decision problems and algorithms. (1 paper)

4.2. Present research and development activities

2019-present Theoretical computer science: String rewriting systems. Decision problems and algorithms.

2012-present Representation theory: Algebras of semigroups and categories. Combinatorial and homological properties. (4 papers)

5. Grants and awards

5.1. Grants

2018. SCE internal grant - Young Research (140,000 NIS)

2016. Scholarship for active participation at an international conference for PhD students from the Israeli Ministry of Science, Technology and Space. (6600 NIS)

5.2. Awards

2015. Bar-Ilan Rector's award for PHD students.

2014. Bar-Ilan Dean's scholarship for Excellent Research students.

2013-2016. Bar-Ilan's PHD scholarship.

2010-2011. Bar-Ilan's MSc scholarship.

6. List of publications

6.1. Peer reviewed papers

1. Representation theory of order-related monoids of partial functions as locally trivial category algebras. *Algebr. Represent. Theory* **23** (2020), no. 4, 1543--1567.
2. The global dimension of the algebra of the monoid of all partial functions on an n -set as the algebra of the EI-category of epimorphisms between subsets. *J. Pure Appl. Algebra* **223** (2019), no. 8, 3515-3536.
3. Algebras of Ehresmann semigroups and categories. *Semigroup Forum* **95** (2017), no. 3, 509-526.
4. The Littlewood-Richardson rule for wreath products with symmetric groups and the quiver of the category $F\mathbf{FI}n$. *Communications in Algebra* **45.5** (2017): 2105-2126.
5. The representation theory of the monoid of all partial functions on a set and related monoids as EI-category algebras. *Journal of Algebra* **450** (2016): 549-569.
6. Reducing the gradedness problem of string rewriting systems to a termination problem. *RAIRO-Theoretical Informatics and Applications* **49.3** (2015): 233-254.

6.2. Books/collective volumes

None

6.3. Papers and abstracts – proceedings of conferences

6.3.1. Invited conference plenary lectures.

None.

6.3.2. Contributed conference presentations

1. June 2019. Quiver presentation for algebras of some order-related monoids of partial functions. SandGal 2019, Cremona, Italy.
2. June 2018. The global dimension of the algebra of the monoid of all partial functions on an n-set, the twenty-eight conference of NBSAN, St. Andrews, UK.
3. June 2017. The global dimension of the algebra of the monoid of all partial functions on an n-set, The 94th Workshop on General algebra, in conjunction with the 5th Novi Sad Algebraic Conference, Novi Sad, Serbia.
4. June 2016. Algebras of Ehresmann semigroups and categories, International conference on semigroup and automata 2016, Lisbon, Portugal.
5. June 2015. The ordinary quiver of the algebra of the monoid of all partial functions on a set, AMS-EMS-SPM International Meeting 2015, Porto, Portugal.
6. January 2015. The ordinary quiver of the algebra of the monoid of all partial functions on a set, the nineteenth conference of NBSAN, York, UK.

6.3.3. Seminar presentations (Outside home institute)

1. March 2018. Representation theory of order-related monoids of partial functions as locally trivial categories, Representation theory seminar, Bar-Ilan University.
2. September 2016. Representation theory of the monoid of partial functions on a finite set as an EI-category algebra, New York Applied Algebra Colloquium, CUNY Graduate Center.
3. June 2016. Representation theory of the monoid of partial functions on a finite set as an EI-category algebra, FA seminar, Tel-Aviv University.

6.4. Patents

None.

7. Academic roles

2014-2017 Organizer of the Student's seminar of the Department of Mathematics. Bar-Ilan University.

8. Preparation of academic programs.

Not relevant.

9. Courses taught

2017 – present Linear Algebra, Calculus 1-2, Discrete mathematics, O.D.E. SCE - Sami Shamoon College of Engineering.

2016-2017 Linear algebra. Bar-Ilan University.

10. Editorial roles

10.1. Manuscripts reviewer

2019 Semigroup Forum
2017 Semigroup Forum

11. Membership in professional/scientific societies

2016-2018 Member. American Mathematical society (AMS).