

**Employment**

- **Northwestern University** Associate Professor, 2015–
- **Northwestern University** Assistant Professor, 2012–2015.
- **Harvard University** Benjamin Pierce Assistant Professor, 2008–2012.

**Education**

- **Hebrew University of Jerusalem**, Ph.D., December 2008,  
*Some Applications of Motivic Integration to Representation Growth.*  
Advisors: David Kazhdan, Alex Lubotzky.
- **Hebrew University of Jerusalem**, M.Sc., October 2003,  
*On Entropy, Spectrum and Mixing for Actions of Continuous Amenable Groups.*  
Advisor: Benjamin Weiss.
- **Technion**, B.A., mathematics, 1997.

**Publications**

1. N. Avni, *Spectral and mixing properties of actions of amenable groups*, **Electronic Research Announcements of the AMS** **11** (2005), 57–63.
2. N. Avni and S. Garion, *Connectivity of the product replacement graph of simple groups of bounded Lie rank*, **Journal of Algebra** **320** (2008), 945–960.
3. E. Hrushovski and D. Kazhdan with appendix by N. Avni, *The value ring of geometric motivic integration, and the Iwahori Hecke algebra of  $\mathrm{SL}_2$* , **GAFA** **17** (2008), 1924–1967.
4. N. Avni, U. Onn, A. Prasad and L. Vasserstein, *Similarity classes of  $3 \times 3$  matrices over a local principal ideal ring*, **Communications in Algebra**, **37(8)**, (2009), 2601–2615.
5. N. Avni, *Entropy theory for cross sections*, **GAFA** **19** (2010), 1515–1538.
6. N. Avni, *Arithmetic groups have rational representation growth*, **Annals of Mathematics (2)** **174**, (2011), 1009–1056.
7. N. Avni and B. Weiss, *Generating Product Systems*, **Journal of Modern Dynamics**, **4 (2)** (2010), 257–270.
8. N. Avni, S. Lim, and E. Nevo, *On Commensurator Growth*, **Israel Journal of Mathematics** **188**, (2012), 259–279.
9. A. Aizenbud, N. Avni, and D. Gurevich, *Gelfand Pairs over Close Fields*, **Commentary Math. Helv.** **87**, (2012), 929–962.
10. N. Avni, B. Klopsch, U. Onn, and C. Voll, *On Representation Zeta Functions of Groups, and a Conjecture of Larsen–Lubotzky*, **C. R. Math. Acad. Sci. Paris, Ser. I** **348** (2010), 363–367.
11. N. Avni, B. Klopsch, U. Onn, and C. Voll, *Representation Zeta Functions Of Compact  $p$ -Adic Analytic Groups And Arithmetic Lattices*, **Duke Mathematical Journal** **162** (2013), 111–197.

12. N. Avni, B. Klopsch, U. Onn, and C. Voll, *Representation zeta functions of some compact  $p$ -adic analytic groups*, **Proceedings of Recent Trends on Zeta Functions in Algebra and Geometry**, 295–330, Contemp. Math., 566, Amer. Math. Soc., Providence, RI, 2012.
13. N. Avni, T. Gelander, M. Kassabov, and A. Shalev, *Word Values in  $p$ -Adic and Adelic Groups*, **Bulletin of the LMS** 45 (2013), no. 6, 1323–1330.
14. N. Avni, B. Klopsch, U. Onn, and C. Voll, *Arithmetic Groups, Base Change and Representation Growth*, **GAFA** 26 (2016), no. 1, 67–135.
15. A. Aizenbud and N. Avni, *Representation Growth and Rational Singularities of the Moduli Space of Local Systems*, **Inventiones Mathematicae** 204 (2016), no. 1, 245–316.
16. A. Aizenbud and N. Avni, *Counting points of schemes over finite rings and counting representations of arithmetic lattices*, **Duke Mathematical Journal** Volume 167, Number 14 (2018), 2721–2743.
17. A. Aizenbud, N. Avni, and Y. Krauz, *Relative Frobenius formula*, submitted.
18. A. Aizenbud, N. Avni, *Bounds on multiplicities of spherical spaces over finite fields*, **Journal of Pure and Applied Algebra** 223 (2019), no. 9, 3859–3868.
19. N. Avni, A. Lubotzky, C. Meiri, *First order rigidity of non-uniform higher rank arithmetic groups*, **Inventiones Mathematicae** 217 (2019), no. 1, 219–240.
20. N. Avni, C. Meiri, *Word have bounded width in  $SL_n(\mathbb{Z})$* , **Compositio Mathematica** 155 (2019), no. 7, 1245–1258.
21. A. Aizenbud, N. Avni, *Good presentations of stacks*. In preparation.
22. N. Avni, C. Meiri, *Uniform higher rank lattices and bi-interpretation with the integers*. In preparation.
23. N. Avni, *The Benjamini–Schramm compactification of  $M_g$* , in preparation.

**Grants**

- Bat Sheva de Rothschild grant for summer school “Representation Growth”. 2009.
- EPSRC Grant EP/G055408/1 (Given to Benjamin Klopsch and Christopher Voll) to support my visit at Southampton. 2009.
- NSF grant DMS 0901638. 2009–2012.
- NSF grant DMS 1303205. 2013–2016.
- NSF grant DMS 1902041. 2019–2022.
- BSF grant 2012247 (co PI). 2013–2017.
- BSF grant 2018201 (co PI). 2019–2024.

- Lady Davis visiting professorship. 2015–2016.
- Midrasha Mathematicae (conference grant). 2016.
- Simons fellowship in mathematics. 2019.

**Awards**

- Giora Yishinski prize, 2004.
- Klein Prize, 2005.
- Clore Fellowship for Ph.D. students, 2006–2008.
- Shlomyok prize for finishing Ph.D. students, 2009.
- Levitzky Prize in Algebra of the Israeli Mathematical Union, 2009.
- Sloan research fellowship, 2014–2016.

**Graduate Students**

- Nan Shi. Graduated 2018.
- Andrew Reiser. Graduated 2018.

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