Avraham Aizenbud - CV

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Employment (as a mathematician)

- 2021 Full Professor, Department of Mathematics, Weizmann Institute of Science.
- 2016 2021 Associate Professor, Department of Mathematics, Weizmann Institute of Science.
- 2013 2016 Senior Scientist, Department of Mathematics, Weizmann Institute of Science.
- 2010 2013 C.L.E. Moore instructor, Department of Mathematics, Massachusetts Institute of Technology.

Education

- 2006 2010 PhD in Mathematics in Weizmann Institute of Science (Supervisors: Prof. J. Bernstein, Prof. V. Berkovich, Thesis: "Gelfand pairs and Invariant Distributions").
- 2005 2006 M. Sc. in mathematics in Tel-Aviv University (Supervisor: Prof. J. Bernstein, Average 98)
- 2002 2005 Status of "Distinguished Student" in IDF. Research under supervision of Prof. J. Bernstein in Tel-Aviv University.
- 2001 2002 M. Sc. student of Mathematics in Tel-Aviv University (Supervisor: Prof. J. Bernstein). The studies were interrupted by the service in the IDF.
- 1997 2001 B. Sc. with honors in mathematics in Tel-Aviv University (Average 93, Studies were done under the Beno Arbel program during High School studies)
- 1995 2001 Matriculation certificate from "Shevah-Mofet high school, Tel-Aviv.

Short Term Visits

- 5-month program "Group Representation Theory and Applications" at the MSRI.
- 2012, 2014 2-month research group "Multiplicity Problems in Harmonic Analysis" at the Hausdorff Research
- Institute for Mathematics, Bonn, Germany.

 1-month at the Max Planck Institute for Mathematics, Bonn, Germany.
- 2009 1-month at the Max Planck Institute for Mathematics, Bonn, Germany.
- 2008 1-month at the Max Planck Institute for Mathematics, Bonn, Germany.
- 3-month workshop "Representation theory, complex analysis and integral geometry" at
 - the Hausdorff Research Institute for Mathematics and Max Planck Institute for Mathematics, Bonn, Germany.

Military Service

2002 - 2005 Mandatory military service in the IDF. Algorithm designer in the military intelligence.

Teaching Experience^[1]

- 2013 Teaching courses at Weizmann Institute of Science. (Algebraic geometry,
 - Generalized Functions, Algebraic topology, Category theory, representation theory of p-adic groups)
- 2014, 2020 Teaching Minicourses for IMO team Banach-Tarski theorem, Dirichlet theorem.
- 2010 2013 Recitation leader at MIT. (ODE, multivariable calculus)
- 2007 Organizer of the scientific treasure hunt contest at Weizmann Institute of Science.
- 2007 Problem composer for the Mathematical Tournament of Schools at Weizmann Institute of Science.
- 2006 2007 Problem composer for the "Zuta" Olympiad for grades 7-9 at Weizmann Institute of Science.
- 2006 Mentor in the International Summer Science Institute at Weizmann Institute of Science. (Mini-course on Dirichlet theorem for distinguished high-school students)
- 2006 Teaching Assistant at the Department of Mathematics at Tel-Aviv University. (Differential
- geometry)
- Teaching Assistant at the Department of Mathematics at Tel-Aviv University. (Complex analysis and linear algebra)
- 2001 2002 Grader at the Department of Mathematics at Tel-Aviv University.

Awards & Grants

- 2021 Erdős Prize
- Morris L. Levinson prize of the Scientific Council of the Weizmann institute of science.
- 2019 2023 BSF research grant "Higher aspects of counting points on schemes".
- 2019 2022 Minerva research grant "Induced spherical pairs".
- 2017 2021 ISF research grant "Invariant distributions and applications to representation theory".
- 2015 2016 The Dr. A. Edward Friedmann Career Development Chair in Mathematics.

2015 Levitzki Prize. 2014 -2017 Minerva research grant "Topological vector spaces in representation theory". 2013 -2017 BSF research grant "Representation Growth and Rational Singularities". 2017 ISF research grant "Algebro-geometric analysis and applications in representation theory". 2013 -2013 -2016 Alon Fellowship for young Israeli researchers. 2012 Clore prize, Weizmann Institute of Science. 2010 -2012 NSF research grant "Representation theory of reductive groups over local fields". 2010 Rothschild Fellowship. J. F. Kennedy prize, Weizmann Institute of Science. 2010 Honors prize for M. Sc. students. 2002 2001 Dean Distinction Prize. First Place in Tel-Aviv University Olympiad of Mathematics. 2000 Dean Distinction Prize. 2000 Distinction Prize for Beno Arbel program Students. 1999 1998 First Place with Honors in the Mathematical Tournament of Towns. Conferences and colloquia Talks^[2] "Bounds on multiplicities of symmetric pairs of (pro-) finite groups". Representation Theory, 2023 Harmonic Analysis and Spherical Varieties, Porquerolles France. 2022 "Multiplicities in relative representation theory". BIU Colloquium 2021 "Multiplicities in relative representation theory". IMU meeting (plenary talk). "Point-wise surjective presentations of stacks", Conference on representation theory and algebraic 2020 analysis in honor of Joseph Bernstein. 2019 "WF-holonomicity of constructible distributions on non-archimedean local fields", TAU Math Colloquium, Tel-Aviv, Israel. "Point-wise surjective presentations of stacks", Sphericity 2019 CIRM, Luminy. 2019 "Counting representations of arithmetic groups and points of schemes", Fourth International 2017 Workshop on Zeta Functions in Algebra and Geometry. 2017 "Bounds on multiplicities of spherical spaces over finite fields", Geometry and Representation "Applications of the Bernstein-Kashiwara Theorem", Sphericity 2016 Conference & Workshop, 2016 Germany. "Points of algebraic varieties over finite rings", Amitsur Symposium in Algebra. 2015 2015 "Holonomicity of spherical characters and applications to multiplicity bounds", Workshop on Generalizations of Symmetric Spaces, Nahsholim, Israel. 2014 "Z-finite distributions on p-adic groups." Twelfth Night Workshop in Representation Theory, Weizmann Institute of Science, Israel. "Frobenius formula and representation count." AMS-IMU meeting, Tel-Aviv, Israel. 2014 "Frobenius formula and representation count." TAU Math Colloquium, Tel-Aviv, Israel. 2014 2015 "Representation count of arithmetic groups, moduli spaces of local systems, and pushforward of smooth measures", IMU meeting, Israel. 2013 "Frobenius formula and representation count", BGU Math Colloquium, Bear-Shava, Israel. "Cohen-Macaulay property in representation theory", AMS Meeting, Cornell university, NY, USA. 2011 "Smooth Transfer of Kloosterman Integrals", MFO "Workshop on harmonic analysis", Oberwolfach, 2010 Germany. "Smooth Transfer of Kloosterman Integrals" and "Relative Representation Theory Over Close Local 2010 Fields", Representations des groupes reductifs p-adiques, Porquerolles, France. 2009 "Relative Representation Theory Over Close Local Fields" on Workshop on Harmonic Analysis and Invariant Distributions, National University of Singapore. 2009 "Multiplicity One Theorems - A Uniform Proof" on the Annual meeting of the Israel Mathematical Union, Weizmann Institute of Science, Israel. 2007 "(GL(n+1,F),GL(n,F)) is a Gelfand pair for any local field F" on the 10th Autumn Workshop on Number Theory, Hakuba, Japan. 2007 "Schwartz functions on Nash manifolds and applications to representation theory", MFO workshop "Harmonische Analysis und Darstellungstheorie Topologischer Gruppen", Oberwolfach, Germany.

Academic Service

2021-	2023	Head of the <u>Israeli math team</u>
2020-	2023	Member of the hiring committee of the scientific consul of the Weizmann Institute of Science.
2017-	2019	Member of the library committee of the scientific consul of the Weizmann Institute of Science.
2017		Co-organizer of "Conference on Representation Theory and Algebraic Geometry", on the occasion of
		Joseph Bernstein's 72nd birthday, Weizmann Institute, Israel.
2017		Co-organizer of Special trimester Representation Theory of Reductive Groups Over Local Fields and
		Applications to Automorphic forms", joint with, Weizmann Institute, Israel.
2017		Co-organizer: "Young Algebra Day", joint with I. Entova-Aizenbud and M. Gorelik, Weizmann
		Institute, Israel.
2014 -	2020	Organizer of the Gillis Olympiad – the national Israeli math competition for high-school students.
2014 -		Co-organizer: Algebraic geometry and representation theory seminar, Weizmann Institute, Israel.

Students and post-docs (current and past)

PhD: Yotam Hendel (graduated in 2019; j/w Joseph Bernstein), Itay Glazer (graduated in 2020),

Guy Kapon (expected to graduate in 2025)

MSc: Itay Glazer (graduated in 2016; j/w David Soudry), Guy Kapon (graduated in 2020), Itamar Hadas

(j/w David Soudry)

Post- Docs. Adam Gal, Roberto Rubio, Devika Sharma, Shay Shechter, Iordan Ganev.

Languages Hebrew (mother tongue), English, Russian

Personal

Birth: June 1, 1983. Ramat-Gan, Israel

Marital Status: Married + 2

[1]. See full list of courses at https://www.wisdom.weizmann.ac.il/~aizenr/6Teaching/

[2]. See full list of talks at https://www.wisdom.weizmann.ac.il/~aizenr/5Talks/