

## Short CV Saharon Shelah

### Personal information:

Family name, first name:: Shelah, Saharon  
Nationality: Israel  
Date and place of birth: July 3, 1945; Jerusalem, Israel  
ORCID and Webpage: 0000-0003-0462-3152, <http://shelah.logic.at/>

### Education:

1970 Ph.D. (Mathematics) Summa cum laude, Hebrew U., Israel. Supervisor: M. O. Rabin.  
1968 M.Sc. (Mathematics) with distinction, Hebrew U., Israel. Supervisor: H. Gaifman.

### Current positions:

1974–present Professor, Hebrew University of Jerusalem, Israel.  
1986–present Distinguished Visiting Professor, Rutgers University, USA.

### Previous positions:

1972–1974 Associate Professor, Hebrew University of Jerusalem, Israel.  
1971–1972 Assistant Professor, Hebrew University of Jerusalem, Israel.  
1970–1971 Assistant Professor, University of California Los Angeles, USA.  
1969–1970 Lecturer, Princeton University, USA.

### Visiting Positions:

1977/09–1978/01 University of Wisconsin at Madison, USA. Visiting Professor.  
1978/01–08 University of California Berkeley, USA. Visiting Professor.  
1982/01–03 University of California Berkeley, USA. Visiting Professor.  
1984/09–1985/05 University of Michigan, USA. Visiting Professor.  
1985/06–08 Simon Fraser University, Canada. Visiting Professor.  
1995, Fall Rutgers University, USA. Visiting Professor.  
1996, Spring University of Wisconsin, Madison, USA. Visiting Professor.  
2000/09–10 Institut Mittag-Leffler, Sweden. Visiting Professor.

### Supervision of graduate students and postdoctoral fellows:

- Supervised 16 M.Sc. students;
- 11 Ph.D. students; six of them have since achieved tenure: U. Abraham (Ben-Gurion U.), S. Ben David (U. of Waterloo), R. Grossberg (Carnegie-Mellon U.), I. Kaplan (Hebrew U.), M. Kojman (Ben Gurion U.), M. Rubin (Ben Gurion U., who died 2017).
- Numerous postdocs, among them the now tenured professors T. Bartoszyński (National Science Foundation), J. Brendle (Kobe U.), J. Cummings (Carnegie-Mellon U.), M. Dugas (Baylor U.), M. Džamonja (U. of East Anglia, now Director of *Logique Consult*), T. Eisworth (Ohio U.), S. Fuchino (Kobe U.), M. Goldstern (TU Wien), M. Malliaris (U. of Chicago), J. Makowsky (Technion, Israel Institute of Technology), H. Mildenberger (Freiburg U.), G. Paolini (U. Torino), A. Rosłanowski (U. of Omaha,

Nebraska), O. Spinas (Christian-Albrechts-U. Kiel), Lutz Strüingmann (Hochschule Mannheim), A. Villaveces (U. Nacional de Colombia in Bogota).

**Awards and Academy Memberships:**

- 2019            honorary doctorate from TU Wien
- 2018            Rolf Schock Prize in Logic and Philosophy. (Awarded every three years by the Royal Swedish Academy of Sciences.)
- 2017            Hausdorff medal. (Awarded every two years by the European Set Theory Society for work published in the previous five years. Together with M. Malliaris).
- since 2013    Honorary member of the Hungarian Academy of Sciences.
- 2013            Leroy P. Steele Prize for Seminal Contribution to Research. (Awarded once a year by the American Mathematical Society.)
- since 2012    Member of the Academia Europaea.
- 2011            EMET Prize in Exact Sciences. (Awarded about every four years to Israeli mathematicians. Together with Noga Alon.)
- 2001            Wolf Foundation Prize in Mathematics. (Together with V. I. Arnold).
- 2000            János Bolyai prize. (Awarded by the Hungarian Academy of Sciences. First recipient after 1910, the two recipients before were Poincaré and Hilbert. Since 2000 awarded every five years.)
- 1998            Israel Prize in Mathematics. (Awarded every few years by the State of Israel to Israeli mathematicians.)
- 1996            Gödel Lecture, Meeting of the Association for Symbolic Logic (ASL), Madison, WI.
- 1991            SIAM 1991 George Pólya Prize in Applications of Combinatorial Mathematics. (Awarded every two years by the Society for Industrial and Applied Mathematics, USA. Together with Gil Kalai.)
- since 1991    Foreign Honorary Member of the American Academy of Arts and Sciences.
- since 1988    Member of Israeli Academy of Science and Humanities.
- 1983            C. Karp prize. (Awarded every five years by the ASL)
- 1982            Rothschild Prize in Mathematics. (Awarded every few years to Israeli mathematicians.)
- 1978            appointed A. Robinson Chair for Mathematical Logic at the Hebrew University, Jerusalem.
- 1977            Erdős Prize. (Awarded by the Israel Mathematical Union to Israeli mathematicians of age up to 40. First recipient.)

**Grants:** Numerous grants from Fulbright (USA), NSF (USA), United States-Israel Binational Science Foundation (USA, Israel), The Niedersachsen Foundation (Germany), The Israel Science Foundation (Israel), Deutsche Forschungsgemeinschaft (Germany), German Israeli Foundation for Scientific Research and Development (Germany, Israel), and the EU (ERC Advanced Grant).

**Editorial boards of scientific journals:** The Israel Journal of Mathematics and the Journal D'Analyse Mathématique (general editorial board); Fundamenta Mathematicae,

Journal of Applied Analysis, and the Asian Journal of Mathematics.

**Invited talks** About a hundred invited talks at international conferences, among them the following:

- 2017 6th European Set Theory Conference, Budapest: Hausdorff Medal lecture
- 2012 6th European Congress of Mathematics, Krakow; plenary lecture: Classifying classes of structures in model theory.
- 2006 Cohen is 72: Analysis, Logic and Number Theory; Stanford University, Stanford, CA *Why Forcing is Great*.
- 2000 AMS conference “Mathematical Challenges of the 21st Century”, Los Angeles, USA, plenary lecture: *Logical dreams*.
- 1986 International Congress of Mathematicians, Berkeley; plenary lecture: *Universal Classes*.
- 1975 Robinson Memorial Conference, Yale; *Refuting the Ehrenfeucht Conjecture*.
- 1974 International Congress of Mathematicians, Vancouver BC; invited lecture: *Stability Theory*.
- 1971 Tarski’s 70th Birthday Conference, Berkeley; *Stability Theory and the Spectrum Conjecture*.

**Publications** More than 1100 peer-reviewed research papers in mathematical journals, about two thirds of them with co-authors (Shelah has been working with more than 250 co-authors). As of August 2022, mathscinet lists 1 137 publications and 10 442 citations by 2 413 authors. (Google scholar lists 34 519 citations, i10-index 677 and h-index 76.) In the mathscinet list, many of the publications are in leading logic journals such as J. Math. Log. (11) or J. Symbolic Logic (146); some are in leading general mathematics journals such as Acta Math. (1), Ann. of Math. (5), Adv. Math. (12), J. Amer. Math. Soc. (6), Trans. Amer. Math. Soc. (39), J. London Math. Soc (11), Bull. London Math. Soc. (10), or Israel J. Math. (160).

A comprehensive list of publications (pdf) can be found at <http://shelah.logic.at/>.

### Books and Monographs:

1. *Classification Theory and the Number of Nonisomorphic Models*. Studies in Logic and the Foundations of Mathematics, 92. North-Holland, 1978. xvi+544 pp. ISBN: 0-7204-0757-5
2. *Proper Forcing*. Lecture Notes in Mathematics, 940. Springer, 1982. xxix+496 pp. ISBN: 3-540-11593-5
3. *Around classification theory of models*. Lecture Notes in Mathematics, 1182, Springer 1986. viii+279 pp. ISBN: 3-540-16448-0
4. *Classification Theory and the Number of Nonisomorphic Models*. Second edition, revised and expanded. Studies in Logic and the Foundations of Mathematics, 92. North-Holland, 1990. xxxiv+705 pp. ISBN: 0-444-70260-1
5. *Cardinal Arithmetic*. Oxford Logic Guides, 29. Oxford University Press, 1994. xxxii+481 pp. ISBN: 0-19-853785-9
6. *Proper and Improper Forcing*. Second edition, revised and expanded. Perspectives in

- Mathematical Logic. Springer, 1998. xviii+1020 pp. ISBN: 3-540-51700-6
7. with A. Rosłanowski: *Norms on possibilities. I. Forcing with trees and creatures*. Mem. Amer. Math. Soc. 141 (1999), no. 671, xii+167. ISBN: 978-0821811801
  8. *Classification theory for elementary abstract classes*. Studies in Logic, 18. College Publications, UK, 2009. 824 pp. ISBN: 978-1-904987-71-0
  9. *Classification theory for abstract elementary classes. Vol 2*. Studies in Logic, 20. College Publications, UK, 2009. 702 pp. ISBN: 978-1-904987-72-2

**In popular-science and other media** Several results were presented (by Shelah, coauthors, and others) in *popular science journals*, such as PNAS (2013a, 2013b), Scientific American (2021), Spektrum der Wissenschaft (in German, 2019 and 2021), or Quanta Magazine (2017); they were reported in various *newspaper articles* such as in the London Times, or (in German) Standard, Presse, or Süddeutsche. Other reports appeared in mathematics (and philosophy) *sites and blogs*, such as the Notices of the AMS, the EMS announcements, dailynews and Tim Gowers' blog.