Name: Sabine Segre

Date: 9.1.22

CURRICULUM VITAE

1. Personal Details

Date and place of birth: 24.04.1964 in Germany Permanent Home Address: Chish 34, Rechovot Home Telephone Number: 08-9318173 Cellular Phone: 054-4466278 Email: <u>sabine.segre@live.achva.ac.il</u> Marital status: married with 4 children Nationality: German and Israeli Languages: German (mother tongue), Italian (mother tongue level), English (fluent), Hebrew (fluent), French (basic)

2. <u>Higher Education</u>

A. Undergraduate and Graduate Studies

Period of Study	Name of Institution and Department	Degree	Year of Approval of Degree
1989-1994	University of Oldenburg (Germany), Mathematics	Ph. D.	1994
1985-1989	University of Marburg (Germany), Physics	Diploma	1989
1983-1985	University of Frankfurt/Main (Germany), Physics	Intermediate Diploma	1985

B. Post-Doctoral Studies

Period of Study	Name of Institution, Department and Host	Year of Completion
1994-1996	The Technion, Department of Aerospace Engineering, distinguished Prof. Daniel Weihs	1996

3. Academic Ranks and Tenure in Institutes of Higher Education

Rank/Position	Name of Institution and Department	Dates
Senior Lecturer	Achva Academic College Department of Mathematics	1.10.2021

4. Academic Appointments

Dates	Name of Institution and Department	Position
2013 to today	Achva Academic College, Department of Mathematics	Lecturer
2011 - 2018	The Technion, Faculty of Aerospace Engineering	Consultant
2012	Weizmann Institute of Science, Department of Science Education	Consultant
2003	Academic College of Ariel (now University)	Lecturer for software applications
2000 - 2001	Tel Aviv University, Department of Zoology, Group for Theoretical Ecology	Research Assistant
1997 – 1999	Polytechnic University of Turin, Department of Mathematics	Marie Curie Fellow
1996 – 1997	University of Hawaii, the Joint Institute for Marine and Atmospheric Research	Research Assistant
1994 – 1996	The Technion (Haifa), Department of Aerospace Engineering	Minerva Fellow
1989 – 1994	University of Oldenburg, Department of Mathematics	Research Assistant

I am an active member of Achva's "Israeli Hope" group, which is a program of the President of the State to establish and strengthen the partnership between the four main sectors that make up Israeli society - secular, ultra-Orthodox, and religious Jews, and Arabs.

5. Additional Professional Experience\Teaching Experience

Years	Institution	Task
2019 - present	Davidson Institute of Science Education, affiliated to the Weizmann Institute of Science/ Ministry of Education	Mentor of gifted high-school students doing research in mathematics
2007 - 2017	Davidson Institute of Science Education, affiliated to the Weizmann Institute of Science	Content developer
2006 - 2010	Institute for Italian Culture	Math and physics teacher
2006 - 2007	Lamda, Jerusalem	Development of mathematics books for elementary schools.

One of the high-school students who did a research work under my supervision received a scholarship to continue his research, due to the high level of his work about "spidrons and other converging series of polygons".

At the Davidson Institute of Science Education, I was

- Math content leader.
- Head of Davidson Online, a science-education internet site.
- Author of more than 10 booklets for the international math-by-mail and science-bymail projects (about 3000 participants in Israel, 1000 abroad).
- Instructor and course developer of specialized math classes and physics labs for 3rd to 9th graders.
- Head of the "math-circle" program for gifted 7th to 9th graders.
- Judge in various math and physics competitions.
- Co-developer of MOOC courses at Future Learn.
- Lecturer at teacher professional development courses.

At the Institute for Italian Culture

- I taught physics and math in Italian in order to prepare Israeli students for their studies in Italy.
- I prepared material for online teaching.
- I was responsible for the math-physics section of the school.

Membership in Professional Societies

2020 – Present	IMU - Israeli Mathematical Union, and EMS – European Mathematical Society
2019 – Present	MCG – International group for Mathematical Creativity and Giftedness

6. Participation in Scholarly Conferences

a. Organization of Conferences

Date	Name of Conference	Place of Conference	Subject of Conference	Role
2016	Crack the Glass Ceiling	The Weizmann Institute of Science	Annual Conference to Trigger Girls' Interest for Math	Member of the organizing committee
2012	Who is afraid of technology?	The Davidson Institute of Science Education	Teacher professional development course about technologies that are relevant for teaching	Organizer
2011	The annual Math-by-Mail conference	The Weizmann Institute of Science	Dimensions	Member of the organizing committee
2010	The annual Math-by-Mail conference	The Weizmann Institute of Science	Spirals	Member of the organizing committee
2009	The annual Math-by-Mail conference	The Weizmann Institute of Science	The Wizard of Odd	Member of the organizing committee
2008	The annual Math-by-Mail conference	The Weizmann Institute of Science	Alice in Wonderland	Member of the organizing committee

b. Active Participation

Israeli Conferences

Date	Name of Conference	Place of Conference	Subject of Presentation	Role
15/02/2021	JCRME 9, Jerusalem Conference on Research in Mathematics Education	Jerusalem College of Technology/ Zoom	The role of summary lectures that integrate the history of mathematics: Teachers' and students' attitudes towards the subject	Presenter, second author: Lina Vinitsky- Pinsky
16/04/2020	The Second Annual Conference of Physics Teachers	The Weizmann Institute of Science/Zoom	Accessible Physics for Students from the Periphery	Presenter
10-11/2/2020	JCRME 8, Jerusalem Conference on Research in Mathematics Education	Jerusalem College of Technology	Fractal Tangram	Presenter
28-29/1/2019	JCRME 7, Jerusalem Conference on Research in Mathematics Education	Jerusalem College of Technology	Strengthening the Formation of Pre- Service Math Education Students Through the Integration of Cultural Identity	Presenter
8-9/2/2016	JCRME 4, Jerusalem Conference on Research in Mathematics Education	Jerusalem College of Technology	Identity and Math – Undiscovered Opportunities	Presenter

International Conferences

Date	Name of Conference	Place of Conference	Subject of Presentation	Role
2019	The 7th International Conference on Teacher Education	Tel Aviv, The Mofet Institute	Strengthening the Formation of Pre-Service Math Education Students through the Integration of Cultural Identity	Presenter
2016	Birdnumbers 2016	Halle, Germany	Training of Young White Storks (Ciconia Ciconia)	Presenter
2016	The 13th International Congress on Mathematical Education (ICME13)	Hamburg, Germany	Identity Empowering Math – Experiences with a Jewish-Arabic Math Seminar	Presenter
2015	The 12th International Conference on Technology in Mathematics Teaching (ICTMT 12)	Faro, Portugal	Tangram, Teaching and Technology	Presenter
2014	The Problem@Web International Conference	Vilamoura, Portugal	Revealing the Inner Connections of Math Using a Clock Puzzle	Presenter
2012	Understanding Lifetime Tracks and Fitness of Long-Distance Avian Migrants (DIP – German- Israel-Project Cooperation)	The Hebrew University of Jerusalem	Mathematical Modelling of Migration Energetics	Presenter
2012	EDEN Conference (European Distance and E-Learning Network)	Porto, Portugal	Interactive e-Learning as a Tool to Overcome Socio-Economic and Age-Related Disadvantages	Presenter

1996	The 3rd ESMTB Conference (European Society for Mathematical and Theoretical Biology)	Heidelberg, Germany	Optimization of Energetic Advantages of Burst Swimming of Fish	Presenter
1996	The 7th IMA Conference on Mathematics in Medicine and Biology	Oxford, England	Bird Migration - An Energy-Based Analysis of Costs and Benefits	Presenter

7. Invited Lectures\ Colloquium Talks

Date	Place of Lecture	Name of Forum	Presentation/Comments
2020	The Feuerstein Institute Jerusalem/Zoom	Think Math! An International Conference about Conceptual Understanding and Cognitive Challenges	A series of three lectures and four workshops for elementary and middle school teachers
2020	Achva Academic College/Zoom	Online Summer Workshops for the Improvement of Teaching	Effective Zoom Sessions
2020	Achva Academic College/Unicko	Spontaneous Lecturer Training at the Outbreak of Corona	How to teach through Unicko
2018	The Davidson Institute of Science Education	The 14th Mind Game Conference	A competitive tangram competition (Workshop)
2017	The Davidson Institute of Science Education	The 13th Mind Game Conference	A competitive tangram competition (Workshop)
2016	The Davidson Institute of Science Education	The Davidson Institute's Monthly Science Colloquium	Aperiodic Tiling – from Islamic Art to Modern Crystallography

2016	The Davidson Institute of Science Education	Teacher professional development course	Integrating Technology in Mathematics Teaching - Geogebra based, lecture and workshop
2016	The Davidson Institute of Science Education	The 12th Mind Game Conference	Aperiodic Tilings (Workshop)
2015	The Weizmann Institute/Amit School for Girls, Rechovoth	The Amit School for girls' program for mathematical excellence	Mathematical activities and a lecture about math and music
2013	The Davidson Institute of Science Education & The Weizmann Institute of Science	Meetings at the Forefront of Science	About Math, Music and Games
2011 & 2012	The Davidson Institute of Science Education	Teacher professional development course	How to Create Educational Animations
2010	The Davidson Institute of Science Education	Teacher professional development course	How to Engage Children in Knot Theory
2009	The Davidson Institute of Science Education	Teacher professional development course	Flexagons

8. Grants

Role in Research	Торіс	Funded by/ Amount/	Year/ number of the related publication
PI	Generalizations of dominoes and their investigation using spectral graph theory	Grant from Achva Academic College's President to promote research, 5000 Shekel	2022
PI	Strengthening the Formation of Pre-Service Math Education Students Through the Integration of Cultural Identity	The Mofet Institute 20,000 NIS	2016-2017 Final Report: Segre, S. (2017).

PI	Modeling Cell Populations of the Immune System	Marie Curie Program/ European Community 72,000 €	1997 – 1999 Stöcker (Segre), S., Curci, M. (1998).
PI	Energetic Costs and Benefits of Bird Migration	Minerva 80,000 DM ≈ 40,000 €	1994 – 1996 Stöcker (Segre), S., Weihs, D. (1998).

9. Teaching - Courses Taught and Developed in Recent Years

Year	Name of Course	Type of Course	Degree	Number of Students
2021- 2022	Movement and Forces (Physics 1)	Lecture Course	B.Ed. program for primary school teachers, Achva Academic College	21
2021- 2022	Problem Solving	Lecture Course and Workshop	M.Ed. program for primary school teachers, Achva Academic College	14
2020	Mathematical Games	Lecture Course and Workshop	M.Ed. program for primary school teachers, Achva Academic College	15 - 20
2018 - 2020	Refresher Course in Physics	Lecture and Exercise	B.A. program in "Communication Disorders"	About 20
2018 - 2020	Refresher Course in Mathematics	Lecture and Exercise	B.A. program in "Communication Disorders"	About 20
2017 - 2021	Set Theory	Lecture Course	B.Ed. program for primary school teachers, Achva Academic College	20 - 30
2017- present	Powers, Roots and Logarithms	Lecture Course	B.Ed. program for secondary school	About 20

			teachers, Achva Academic College	
2017- 2020	Math Education Seminar	Seminar	B.Ed. program for primary and secondary school teachers, Achva Academic College	About 20
2017- 2018	From Algorithms to Concepts, from Concepts to Algorithms	Seminar	M.Ed. program for primary school teachers, Achva Academic College	10 - 20
2015- 2016, 2018- 2021	Physics 2 – Electricity, Magnetism, Waves and Light	Lecture Course and Laboratory	B.Ed. program for primary school teachers, Achva Academic College	About 30
2015- 2016	Integrating Modern Technological Tools in Mathematics Teaching	Lecture course and Workshop	B.Ed. program for secondary school teachers, Achva Academic College and Alpha - the High-school teaching certificate (the Second Career program)	About 20
2015- present	Problem Solving (second part of the three-year-long course)	Lecture course and Workshop	B.Ed. program for secondary school teachers, Achva Academic College	10-20
2015- present	Problem Solving (third part of the three-year-long course)	Lecture course and Workshop	B.Ed. program for secondary school teachers, Achva Academic College	10-20
2015- 2016	Problem Solving (first part of the three-year-long course)	Lecture course and Workshop	B.Ed. program for secondary school teachers, Achva Academic College	About 20
2014- 2016, 2017 - present	Mathematics Seminar	Seminar	B.Ed. program for primary school teachers, Achva Academic College	20-25

2014- 2016	Development of Learning Environments with Technology	Lecture course and Workshop	B.Ed. program for elementary school teachers, Achva Academic College	20-30
2014- 2015	Using Computers in Mathematics Teaching	Lecture course and Workshop	B.Ed. program for elementary school teachers, Achva Academic College	about 20
2013- 2016	Trigonometry	Lecture course	B.Ed. program for secondary school teachers, Achva Academic College	20-30
2013- 2016	Analytic Geometry	Lecture course	B.Ed. program for secondary school teachers, Achva Academic College	20-30

In addition, I participated in the preparation of two MOOC courses at Future Learn and guided participants through these courses:

- Math Puzzles: Cryptarithms, Symbologies and Secret Codes, and
- Flexagons and the Math Behind Twisted Paper.

My name was removed from the list of course instructors, after I had left the Davidson Institute.

10. Scientific Publications

Theses

- Stöcker (Segre), S. (1994). Daisyworldmodelle zur Biosphäre-Klima-Kopplung [Daisyworld models for a biosphere-clinmate-coupling]. PhD thesis. Aachen: Verlag Shaker.
- Stöcker (Segre), S. (1989). Modelle zur Auslöschung von Populationen [Models for the Extinction of Populations]. Diploma thesis. Department of Physics, Philipps-University Marburg.

School textbooks approved by the Ministry of Education:

Royi Lachmy, Alex Friedlander, Zippora Resnick, Jeff Sayah and Sabine Segre. מצוינות [Rechovot Excellence]. Math activities for 8th graders. Menahelet Malam. 2013.

Chapters in books

Nicola Bellomo, Sabine Stöcker (2000). Development of Boltzmann Models in Mathematical Biology. In N. Bellomo, M. Pulvirenti (ed.), *Modelling in Applied Sciences - A Kinetic Theory Approach* (pp. 225 – 262). Birkhäuser, Boston.

Publications in peer-reviewed Journals

- Segre, S. (2021). Cultural Identity Promoting Pre-Service Math Educators in Israel. *Journal of Interdisciplinary Sciences* 5(1), pp. 48-63.
- Stöcker-Segre, S., Weihs, D. (2017). Preparations of Young White Storks Ciconia Ciconia for Migration Flight. *Vogelwelt*, 137, 206 214.
- Stöcker-Segre, S., Weihs, D. (2015). Impact of Environmental Changes on Migratory Bird Survival. *International Journal of Ecology*, 15 pages, <u>http://dx.doi.org/10.1155/2014/245849</u>. Q4
- Almogy, G., Cohen, N., Stöcker (Segre), S., & Stone, L. (2002). Immune Response and Virus Population Composition; HIV as a case study. *Proceedings of the Royal Society of London B: Biological Sciences*, 269 (1493), 809 – 815. Q1
- Stöcker (Segre), S., Weihs, D. (2001). Optimization of Energetic Advantages of Burst Swimming of Fish. *Mathematical Methods in the Applied Sciences*, 24, 1387-1400. Q1
- Stöcker (Segre), S. (1999). Models for Tuna School Formation. Mathematical Biosciences, 156 (1-2), 167 – 190. Q2
- Stöcker (Segre), S., Curci, M. (1998). Modelling and Simulating the Effect of Cytokines on the Immune Response to Tumor Cells. *Math. Comput. Modelling*, 28 (3), 1 – 13.
- Rondoni, L., Stöcker (Segre), S. (1998). Dynamical Ensembles in Nonequilibrium Statistical Mechanics and their Representations. *Chaos*, 8 (2), 374 383. **Q1**
- Stöcker (Segre), S., Weihs, D. (1998). Bird Migration an Energy-Based Analysis of Costs and Benefits. *IMA Journal of Mathematics Applied in Medicine and Biology*, 15 (1), 65 – 85. Q2
- Stöcker (Segre), S., Weihs, D. (1996). Foraging Costs as a Defining Factor for Growth and Asymptotic Mass. *Bulletin of Mathematical Biology*, 58 (4), 739-751. **Q1**

- Stöcker (Segre), S. (1995). Stability Due to Variability in Daisyworld Models. Journal of Biological Systems 3 (2), 331-339. Q2
- Stöcker (Segre), S. (1995). Regarding Mutations in Daisyworld Models. *Journal of Theoretical Biology* 175, 495-501. **Q1**
- Stöcker (Segre), S., Wissel, C., (1991). Extinction of Populations by Random Influences. *Theoretical population biology* 39 (3), 315 328. **Q2**
- Wissel, C., Stöcker (Segre), S. (1989). Modelle über die Auslöschung von Populationen [Models for the Extinction of Populations]. Verhandlungen der Gesellschaft für Ökologie 18, 491-497.

Publications in peer-reviewed conference proceedings

- Serge, S. & Vinitsky-Pinsky, L. (2021). המשלבת היסטוריית המתמטיקה (2021). הפקידה של הרצאת סיכום המשלבת היסטוריית המתמטיקה (The role of summary lectures that incorporate the history of mathematics. A case study: Teachers' and student teachers' attitudes towards the subject], *JCRME9, Jerusalem Conference on Research in Mathematics Education* (pp. 153-157). Jerusalem: The Mofet Institute.
- Segre, S. (2020). החרות טנגרם שיתופית [A Cooperative Tangram Competiton]. *JCRME8*, *Jerusalem Conference on Research in Mathematics Education* (pp. 246-250). Jerusalem: The Mofet Institute.
- Segre, S. (2019). היזוק הכשרתם של מורים למתמטיקה באמצעות שילוב זהותם התרבותית [Strengthening the Formation of Pre-Service Math Education Students Through the Integration of Cultural Identity]. *JCRME7, Jerusalem Conference on Research in Mathematics Education* (pp. 210-213). Jerusalem: The Mofet Institute.
- Segre, S. (2016). דהות ומתמטיקה הזדמנויות שכדאי לנצל [Identity and Math Undiscovered Opportunities]. *JCRME4, Jerusalem Conference on Research in Mathematics Education* (pp. 75-78). Jerusalem: The Mofet Institute.
- Stöcker-Segre, S. (2015). Tangram, Teaching and Technology. In *Proceedings of the 12th International Conference on Technology in Mathematics Teaching* (pp. 164-169).
 Faro, Portugal: Universidade do Algarve.
- Stöcker-Segre, S. (2014). Revealing the Inner Connections of Math Using a Clock Puzzle. In: Carreira, S., Amado, N., Jones, K., & Jacinto, H. (Eds.) Proceedings of the Problem@Web International Conference: Technology, creativity and affect in mathematical problem solving (pp. 217 – 221). Faro, Portugal: Universidade do Algarve.

Stöcker, S., & Elran, Y. (2012). Interactive e-Learning as a Tool to Overcome Socio-Economic and Age-Related Disadvantages. *Proceedings of the 2012 Annual Eden Conference* (p. 90). Porto.

Research Reports

- Segre, S. (2017). Strengthening the Formation of Pre-Service Math Education Students Through the Integration of Cultural Identity. *Final Grant Report*, Tel Aviv: Mofet Institute.
- Rondoni, L., Stöcker (Segre), S. (1998). Dynamical Ensembles in Nonequilibrium Statistical Mechanics and their Representations. *Rapporto Interno N. 12*, *Dipartimento di Matematica*, Politecnico di Torino.
- Stöcker (Segre), S., Curci, M. (1998). Modelling and Simulating the Effect of Cytokines on the Immune Response to Tumor Cells. *Rapporto Interno N. 4, Dipartimento di Matematica*, Politecnico di Torino.
- Stöcker (Segre), S..Cellular Automaton Models for Fish Schools: Merging Social Behavior and Hydrodynamics. *JIMAR Contribution* 98-316, Joint Institute for Marine and Atmospheric Research, University of Hawaii.
- Stöcker (Segre), Weihs, D.. Bird Migration an Energy Based Analysis of Costs and Benefits. *TAE* 785, TECHNION-Israel Institute of Technology.

Mathematics and Science Booklets for the Math and Science-by-Mail Programs

- Segre, S. (2011). נוזלים [Liquids]. Rechovot: The Davidson Institute of Science Education.
- Segre, S. (2011). אימינו [Domino]. Rechovot: The Davidson Institute of Science Education.
- Lachmy, R., Segre, S., Elran, Y., & Elran, M. (2011). מעגלולים [Rolling Circles Cycloids]. Rechovot: The Davidson Institute of Science Education.
- Hagai, T., & Segre, S. (2011). אקולוגיה [Ecology]. Rechovot: The Davidson Institute of Science Education.
- Elran, Y., Elran, M., & Stöcker (Segre), S. (2011). אופרטורים [Operators]. Rechovot: The Davidson Institute of Science Education.
- Stöcker (Segre), S., Elran, Y., Elran, M., & Lachmy, R. (2010). אה הקשר [Why knot?]. Rechovot: The Davidson Institute of Science Education.

- Lachmy, R., Elran, Y., Elran, M., & Stöcker (Segre), S. (2010). מעגלי אפולוניוס [Appolonian Cycles]. Rechovot: The Davidson Institute of Science Education.
- Elran, Y., Elran, M., Stöcker (Segre), S., & Lachmy, R. (2010). הורים מתמטיים [Mathematical Black Holes (attractors)]. Rechovot: The Weizmann Institute of Science Education.
- Elran, Y., Elran, M., Stöcker (Segre), S., & Lachmy, R. (2010). מספרי פיבונצ'י [Fibonacci Numbers]. Rechovot: The Davidson Institute of Science Education.
- Stöcker (Segre), S., Elran, Y., Elran, M., & Lachmy, R. (2009). שורעירים [Tournaments]. Rechovot: The Davidson Institute of Science Education.
- Stöcker (Segre), S. (2009). גופים אפלטונים [Platonic Solids]. (Y. Elran, Ed.) Rechovot: The Davidson Institute of Science Education.
- Elran, Y., Elran, M., Stöcker (Segre), S., & Lachmy, R. (2009). דקוסם מארץ עוד [The Wizard of Odd. Three booklets (on different levels of difficulty) about number theory]. Rechovot: The Davidson Institute of Science Education.

Davidson Online Articles

I am the author of about 150 math puzzle and articles published on "Davidson Online" (a science education internet site): <u>http://tiny.cc/sabine_davidson</u>. Among them:

- Segre, S. (2015). התריסרון המעוין כתבה אינטראקטיבית [The Rhombic Dodecahedron an Interactive Article]. Retrieved from Davidson Online: <u>https://davidson.weizmann.ac.il/online/mathcircle/articles/-התריסרון-המעוין---כתבה-kttps://davidson.weizmann.ac.il/online/mathcircle/articles/</u>
- Segre, S. (2015). איז על עצמו [Self-replicating Tangram]. Retrieved from Davidson Online: <u>https://davidson.weizmann.ac.il/online/mathcircle/articles/מעגרם-שחוזר-על-עצמו.</u>
- Segre, S. (2015). ממד הדמיון העצמי [Self-Similarity Dimension]. Retrieved from Davidson Online: <u>https://davidson.weizmann.ac.il/online/mathcircle/articles/</u><u>ממד-הדמיון-</u>.
- Segre, S. (2015). Hands on the Clock. Retrieved from Davidson Online: <u>https://davidson.weizmann.ac.il/en/online/mathcircle/puzzles/riddle-2-hands-clock</u>.
- Segre, S. (2011). ריצוף פנרוז [Penrose Tiling]. Retrieved from Davidson Online: <u>https://davidson.weizmann.ac.il/mathcircle/clips/</u>.

Further Math and Science Booklets and Articles

- Saig, A., Segre, S., & Golan, J. (2018). שפירמידה ועד כדורגל [From Pyramids to Footballs]. Rechovot: The Davidson Institute of Science Education and The Weizmann Institute of Science.
- Segre, S., (2017). ספיידרונים [Spidrons, an Interactive Geogebra Book]. Retrieved from Geogebra: <u>https://www.geogebra.org/m/mCnGwSWK</u>
- Sabine Stöcker and Yoram Maneiviz (2008). דרך הישר [The Correct Path]. גליליאו [Galileo]. 124, 62-67. <u>https://www1.biu.ac.il/File/Magazines/Galileo/GalileoDec2008He.pdf</u>

Book Reviews

I used to frequently review books for "Spektrum der Wissenschaft" which is the German edition of "Scientific American". Among others (20 in total) I have been reviewing the following books:

- Stöcker (Segre), S. (2007). Schöpfung ohne Schöpfer. [Review of Börner, G. (2011). The Wondrous Universe: Creation without Creator? Springer Berlin Heidelberg]. Spektrum der Wissenschaft (12).
- Stöcker (Segre), S. (2004). Wie die Quantenphysik unser Weltbild verändert. [Review of the German translation of Malin, S. (2003). Nature Loves to Hide: Quantum Physics and Reality, a Western Perspective], Spektrum der Wissenschaft (10).
- Stöcker (Segre), S. (2002). Von Menschen und Ameisen. [Review of the German translation of Gandolfi, A. (1999). Formicai, imperi, cervelli: introduzione alla scienza della complessità. Bollati Boringhieri], Spektrum der Wissenschaft (3).
- Stöcker (Segre), S. (1998). Naturwissenschaften und Religion. [Review of the German translation of Wilber, K. (1998). The Marriage of Sense and Soul: Integrating Science and Religion. Random House], Spektrum der Wissenschaft (12).
- Stöcker (Segre), S. (1998). Kleine Philosophie der Naturwissenschaften. [Review of Janich, P. (1997). Kleine Philosophie der Naturwissenschaften. Beck], Spektrum der Wissenschaft (6).
- Stöcker (Segre), S. (1996). Einstein und die Religion. [Review of the German original of Jammer, M. (2002). Einstein and Religion: Physics and Theology. Princeton University Press], Spektrum der Wissenschaft (9).

- Stöcker (Segre), S. (1995). Die Natur der Natur. Wissen an den Grenzen von Raum und Zeit. [Review of the German translation of Barrow, J. D. (1988). *The World Within the World*. Clarendon Press.], *Spektrum der Wissenschaft* (5).
- Stöcker (Segre), S. (1993). Die neuen Grenzen des Wachstums. [Review of the German translation of Meadows, D. H., Meadows, D. L., Randers, J., (1992). Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future. Chelsea Green Pub.], Spektrum der Wissenschaft (7).

Scientific Book Translations

I translated the scientific chapters of the following book from Italian to German:

Cattaneo, M. (2004). Werner Heisenberg - Von der Quantenrevolution zur Weltformel. (E. Bellone, Ed.). Spektrum.

Submitted Papers

Title	Journal	Author
חידות חיתוך והרכבה [Dissection Puzzles]	מספר חזק 2000	Sabine Segre

Submitted Conference Contributions

Date	Name of Conference	Place of Conference	Subject of Presentation	Role
9- 10.2.2022	JCRME 10	Jerusalem	למידה מבוססת פרויקטים אודות פוליומינואים Project-Based Learning with Polyominoes	Presenter
9- 10.2.2022	JCRME 10	Jerusalem	Polyominoes (workshop)	Presenter

July 2021 (postponed to 2022)	16 th Biennial IHPST Conference (International History, Philosophy and Science Teaching Group)	University of Calgary, Canada	Summary Lecture as a Delay Organizer of pre- and in- service mathematics teachers' knowledge: A case of Discipline Culture Approach in mathematics.	Second author, Presenter: Lina Vinitsky- Pinsky
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Papers to be submitted

Title	Journal	Author
Fractal Tangram	Recreational Mathematics Magazine	Sabine Segre

11. Further Knowledge and Skills

Operating Systems: Unix, Linux, Windows, mac OS

Programming languages: Fortran, Pascal, C, C++, html5, Javascript

Programs: Matlab, Mathematica, Scilab, Virtual Math Teams, Geometry Expressions, Geogebra, Graphviz, Gimp, KnotPlot

LMS: Moodle and DOCEBO

MOOC

Video conferencing platforms: Unicko and Zoom

12. <u>Research Profiles</u>

https://www.researchgate.net/profile/Sabine_Stoecker-Segre

https://orcid.org/0000-0002-5345-452X

13. Honors

Scholar (now Alumna) of the "Studienstiftung des deutschen Volkes" – the German national foundation for scholarships promoting only 1% of students at German universities, based on academic achievements.

14. Public Activities

July- December 1986: Volunteer in two day-care centers for children in South-India.

Since June 2009: Website editor of the Israeli Alumni group of scholars of the German national scholarship foundation.