

# CURRICULUM VITAE - Anthony J. Weiss

July 22, 2022

## 1 Personal Data

Name: Anthony J. Weiss  
Academic Degree: Ph.D. Professor Emeritus  
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## 2 Education

From 1969 to 1973 Technion, Israel Institute of Technology, Haifa, Israel.  
Electrical Engineering.  
B.Sc. *Cum Laude*, 1973.

From 1979 to 1982 Tel-Aviv University, Tel-Aviv, Israel.  
Electrical Engineering.  
M.Sc. *Summa Cum Laude*, 1982.

From 1982 to 1985 Tel-Aviv University, Tel-Aviv, Israel.  
Electrical Engineering.  
Ph.D. *Summa Cum Laude*, 1985.

Master's Thesis: *Time Delay Estimation for Random Processes.*

Doctoral Dissertation: *Fundamental Bounds in Parameter Estimation.*

## 3 Academic and Professional Experience

- **1974 - 1975**, *Maintenance Engineer*: RF systems, Tracking systems, Remote control and telemetry, Communications, Power systems.
- **1975 - 1976**, *Research and Development Engineer*: Development of PAM telemetry system.
- **1977**, *System Engineer* Cape Canaveral (Cape Kennedy), Florida.
- **1978 - 1983**, *System Engineer*: Definition and top level design of large scale multi-discipline system, including: Antennas, RF systems, Servo-mechanisms, Adaptive systems, Direction Finding, Time of Arrival estimation, Microcomputers, Spread Spectrum techniques.
- **1983 - 1985**, *Teaching Assistant* with the department of Electrical Engineering-Systems, Faculty of Engineering, Tel-Aviv University.
- **1985 - 1986**, *Faculty member (lecturer)* at Tel-Aviv University, Department of Electrical Engineering-Systems. Teaching: Control-Theory, Communications Circuits, and Telephone Networks.
- **1986 - 1987**, *Visiting Scientist* at M.I.T. (Massachusetts Institute of Technology), Laboratory for Information and Decision Systems, Cambridge, MA, 02139, U.S.A. Research activity mainly in the area of Array Processing.

- **1987 - 1988**, *Senior Research Engineer* with the Advanced Technology Group, SAXPY Computer Corporation, Sunnyvale, California; Performing research in the areas of Array Processing, Dynamic Programming, IR sensors for SDI (Strategic Defense Initiative, or Star War) applications, Parallel Architectures, and Synthetic Aperture Radars.
- **1988 - 1991**, *Faculty member (senior lecturer)* at Tel-Aviv University, Faculty of Engineering, Department of Electrical Engineering-Systems. Teaching: Spread Spectrum Techniques, Digital Signal Processing, and Discrete Systems.
- **1991 - 1992**, Sabbatical leave at Signal Processing Technology Ltd. California.
- **1991 - 1996**, *Associate Professor* at Tel-Aviv University, Faculty of Engineering, Department of Electrical Engineering-Systems.
- **1996 - present**, *Full Professor* at Tel-Aviv University, Faculty of Engineering, Department of Electrical Engineering-Systems.
- **1996 - 1999**, *Chairman* of the Dept. of Electrical Engineering-Systems, Tel Aviv University.
- **2006 - 2011**, *Chairman* of the School of Electrical Engineering, Tel Aviv University.
- **2011 - 2014**, *Head*, Tel Aviv University, International Program in Electrical Engineering
- **1983 - present**, *Consultant* for the industry.

## 4 Active Participation in Scientific Meetings

See “List of Publications–Conference papers”.

## 5 List of Patents

1. U.S. Patent No. US 5,784,031 entitled VERSATILE ANTENNA ARRAY FOR MULTIPLE PENCIL BEAMS AND EFFICIENT BEAM COMBINATIONS, July, 1998.
2. U.S. Patent No. US 5,956,621 entitled METHOD AND APPARATUS FOR ADAPTING OMNIDIRECTIONAL SYNCHRONOUS WIRELESS COMMUNICATIONS PROTOCOL TO SECTORIAL ENVIRONMENTS, Sep., 1999.
3. U.S. Patent No. US 5,953,639 entitled MULTI-BEAM ENCODING SYSTEM FOR TWO-WAY PAGING, Sep., 1999.
4. U.S. Patent No. US 6,016,421 entitled CONFLICT RESOLUTION IN A MULTI-BEAM MULTI-SITE PAGING SYSTEM, Jan., 2000.
5. U.S. Patent No. US 6,097,931 entitled IMPROVED TWO-WAY PAGING UPLINK INFRASTRUCTURE.
6. U.S. Patent no. US 6,112,057 entitled CONFLICT RESOLUTION IN A MULTI-BEAM MULTI-SITE PAGING SYSTEM, Aug., 2000.
7. U.S. Patent US 6,128,472 entitled EXPANDING A TWO-WAY PAGING SYSTEM FOR HIGH INBOUND TRAFFIC FROM STATIONARY SITES, October 2000.
8. U.S. Patent no. US 6,246,884 entitled SYSTEM AND METHOD FOR MEASURING AND LOCATING A MOBILE STATION SIGNAL IN A WIRELESS COMMUNICATION SYSTEM, June, 2001.

9. U.S. Patent no. US 6,366,195 entitled POWER CONTROL IN TWO-WAY PAGING SYSTEMS, April, 2002.
10. U.S. Patent no. US 9,516,621. entitled METHOD AND SYSTEM FOR ESTIMATING POSITION, 6 Dec 2016.
11. US Patent 20,150,092,766, 2015 entitled JOINT EMITTER LOCALIZATION AND PASSIVE SENSOR NETWORK SYNCHRONIZATION.
12. US Patent 2022/0039036 A1 LOCALIZATION , SYNCHRONIZATION AND NAVIGATION USING PASSIVE SENSOR NETWORKS

## 6 Academic and Professional Awards

- **1983**, *SENIOR AWARD* of the IEEE Acoustics, Speech, and Signal processing Society for the paper “Fundamental Limitations in Passive Time Delay Estimation.” (See publication list.) “The ASSP Senior Award is given to honor a person who is an author of a paper of exceptional merit dealing with a subject related to the society’s technical scope, and appearing in the Society’s Transactions.”
- **1985**, *ROTHSCHILD FELLOWSHIP*. (This is a grant for one year of advanced studies or research, abroad, for post-doctoral candidates. Sixteen grants are awarded each year on a competitive basis.)
- **1985**, *ALON FELLOWSHIP*. (Awarded each year to 25 distinguished Israeli scientists. The award covers the winner’s employment as a faculty member in an Israeli university for three years.)
- **1986**, *SENIOR MEMBER GRADE, IEEE*. Awarded by the Officers and Board of Directors of the Institute of Electrical and Electronics Engineers, Inc., in recognition of professional standing.
- **1988**, *GRANT (\$1,000,000)*. A proposal for developing an HF Direction Finding system as a joint venture of Zeta Laboratories, Inc. (USA) and MTI Systems and Communications (Israel), prepared and based on results obtained by A.J. Weiss, was approved by the BIRD foundation. BIRD is a Binational Research and Development foundation which promotes joint ventures of Israeli and US companies. (Due to a change in ownership of Zeta Lab. the grant was not used.)
- **1990**, *RESEARCH AWARD*. Awarded by the *Association of Technological Education in the Areas of Electronics and Computers*. The purpose of this award is to encourage research and leadership of young faculty members in the areas of electronics and computers, provided that the research is relevant to the industry in Israel. Awarded for outstanding research contribution, on a competitive basis.
- **1997**, *FELLOW OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)*, with the following citation: “For development of lower bounds on the accuracy of parameter estimation and contributions to time delay estimation and array processing.”
- **1997**, *BEST ELECTRICAL ENGINEERING LECTURER AWARD*, Faculty of engineering, Tel Aviv University.
- **1999**, *FELLOW OF THE INSTITUTION OF ELECTRICAL ENGINEERS (IEE now IET)*.
- **2000**, *IEEE Third Millennium Medal for outstanding achievements and contributions*.
- **2005**, *BEST LECTURER AWARD*, Faculty of engineering, Tel Aviv University.
- **2009**, Best paper award for: J.S. Picard, and A.J. Weiss, “Direction Finding of Multiple Emitters by Spatial Sparsity and Linear Programming,” *Proceedings of the 2009 International Symposium on Communications and Information Technologies (ISCIT 2009)*, 28-30 September 2009, Incheon, Korea.

- **2009**, Best student paper of the year 2008 in Signal Processing and Coding for Data Storage sponsored by the Data Storage Technical Committee of IEEE Communication Society for the paper: O. Shental, N. Shental, S. Shamai (Shitz), I. Kanter, A.J. Weiss, and Y. Weiss, "Discrete-Valued Input Two-Dimensional Gaussian Channels with Memory: Estimation and Information Rates via Graphical Models and Statistical Mechanics," *IEEE Transactions on Information Theory*, vol. 54, no. 4, pp. 1500-1513, April 2008.
- **2010** Incumbent of the Celia and Marcos Maus Chair of Digital Signal Processing.
- **2016** Best paper award for A. Weller-Weiser, Y. Orchan, R. Nathan, M. Charter, A. J. Weiss and S. Toledo "Characterizing the Accuracy of a Self-Synchronized Reverse-GPS Wildlife Localization System," The 15-th ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN), April 11-14. 2016, Vienna, Austria.

## 7 Invited Talks

- **2010** Military Technologies, Avenue Congress Center, Air port City, Israel, May 6, 2010, **Plenary Speaker**, "Emitter Location in the Presence of Jamming."
- **2010** Military and Aviation, Avenue Congress Center, Air port City, Israel, May 26, 2010, **Plenary Speaker**, "New Methods in Localization."
- **2010** The 6-th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM 2010), **Plenary Speaker**, "Direct Position Determination and Sparsity in Localization Problems."
- **2011** DSP-DAY @ TAU: A DSP Symposium Marking the 10th Anniversary of the TAU DSP Labs. Invited Lecture.
- **2011** Invited course at Rafael.
- **2011** Invited Lecture, *The 4th International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP2011)*, San Juan, Puerto Rico, December 13-16, 2011
- **2013** Invited course at Elbit/Elisra/Tadiran.
- **2013** Invited course at IAI.
- **2013** Invited course at Rafael.
- **2014** 3rd Annual Underwater Acoustics Symposium, June 19, 2014.
- **2015** 4th Annual Underwater Acoustics Symposium, June 17 2015.
- **2016** Invited course at Elta.
- **2016** 5th Annual Underwater Acoustics Symposium, May 25 2016.
- **2016** Invited course at Rafael.

## 8 Supporting Grants

The following grants supported research which was performed in the US during leave of absence, Sabbatical and summer periods:

1. Office of Naval Research, contract: N00014-82-C-0152.

2. Naval Underwater Systems Center, contract: 00140-83-C-KA35.
3. Army Research Office, contract: DAAL03-86-C-0018.
4. US Army Strategic Defense Command, contract: DASG60-87-C-0062.
5. Army Research Office, contract: DAAL03-89-C-0007.
6. Army Research Office, contract: DAAL03-91-C-0022.
7. University of California, Davis, Program: P-1-2538.

The following grant supports research which is performed in Israel:

1. Tel Aviv University Research fund. From Sept. 1, 1995 to Aug. 31, 1996. Subject: Separation and Reconstruction of Signals using Uncalibrated Array of Sensors.
2. Fleischman Fund. 1996/7. Subject: Reconstruction of Signals using Uncalibrated Sensors.
3. Tel Aviv University Research fund. From Sept. 1, 1997 to Aug. 31, 1998. Subject: Fast Search-Free Processing of Signals Intercepted by a Sensor Array.
4. Israel Science Foundation (ISF), 2004-2008. Grant number 1232/04 Emitter Location via New Methods.
5. Institute for Future Defense Technologies Research Named for the Medvedi, Shwartzman and Gensler, 2005-2006.
6. Advanced Communication Center, Tel Aviv University -Intel Inc.
7. Institute for Future Defense Technologies Research Named for the Medvedi, Shwartzman and Gensler, 2008-2010.
8. Israel Science Foundation (ISF), 2008-2010. Grant number 218/08 Effective Exploitation of the Doppler Effect for Emitter Geolocation.
9. MAGNET - Cognitive Radio, 2010-2012, Generation of Transceivers Geographical Maps.
10. Institute for Future Defense Technologies Research Named for the Medvedi, Shwartzman and Gensler, 1/4/2011-31/3/2012.
11. MAFAAT, Single Platform Localization, 2011.
12. Institute for Future Defense Technologies Research Named for the Medvedi, Shwartzman and Gensler, 1/3/2012-29/2/2013. Single station localization.
13. Institute for Future Defense Technologies Research Named for the Medvedi, Shwartzman and Gensler, 1/4/2012-31/3/2013. Localization of own nodes and foreign nodes using time measurements.
14. MAGNETON with Elbit/Elisra on cellular Radar. July 2012 to July 2014. NIS 1,000,000.
15. MINERVA, Advanced Animal Tracking Technologies and Analysis Tools for Movement Ecology, 38,000 Euro, 2012.
16. Navy, Under Water Acoustics, 2012. NIS 100,000.
17. Kamin, Localization in heavy multi-path, May 2013-2015. NIS 800,000.
18. MAFAAT, Localization 2013, NIS 375,000.

19. Institute for Future Defense Technologies Research Named for the Medvedi, Shwartzman and Gensler, 1/3/2013-28/2/2014. Transponder aided Localization. NIS 100,000.
20. Navy, Under Water Acoustics, 2013. NIS 100,000.
21. Institute for Future Defense Technologies Research Named for the Medvedi, Shwartzman and Gensler, 1/3/2014-31/3/2015. Sensor Synchronization and Emitter Localization without GPS. NIS 70,000.
22. MAFAAT, Localization 2014, NIS 200,000.
23. Navy, Under Water Acoustics, 2014. NIS 100,000.
24. MAFAAT, Optimal tracks, 2014. NIS 85,000.
25. PAZI Foundation, "Localization, Navigation and Synchronization without GPS", 1.1.2015 to 31.12.2018, NIS 1,120,000.
26. Institute for Future Defense Technologies Research Named for the Medvedi, Shwartzman and Gensler, 1/4/2015-31/3/2016. Localization Methods with Very High Resolution for Dense Targets. NIS 70,000.
27. Israel Science Foundation (ISF), 2015-2019. Grant number 503/15, NIS 235,000 for each year. Co-investigator Dr. Dan Raphaeli. Stable and Efficient Algorithms for improved localization accuracy in dense multipath.
28. Israel Science Foundation (ISF), 2015-2018. Grant number 965/15, NIS 400,000 for each year. Co-investigator Professor Ran Nathan and Professor Sivan Toledo. High rate and high throughput Tracking of Wildlife.
29. Navy, Under Water Acoustics, 2015. NIS 100,000
30. MAFAAT, DPD in low SNR, August 2016. NIS 200,000.
31. Navy, Under Water Acoustics, 2016. NIS 100,000
32. MAFAAT. Center for Underground Exploration 2019 - 2021
33. MAGNETON with ELISRA/ELBIT 2021-2022

## 9 Membership in Professional Societies

- **Since 1985**, The Institute of Electrical and Electronics Engineers (IEEE) (International Society).

## 10 Professional and Academic Committees

- **1990/91** Member of the Teaching Committee and Graphics Committee.
- **1991/92** Sabbatical.
- **1992/93** Member of the Teaching Committee.
- **1993/94** a. Secretary of IEEE Israel Section, b. Member of the Teaching Committee.
- **1994/95**
  - Founded the IEEE Signal Processing Chapter in Israel and is the chairperson of this chapter.
  - Chairman the Library Committee.
  - Founded the News Letter of IEEE/Israel. Serves as the Editor.

- Member of the Organizing Committee of The Eighteenth Convention of Electrical and Electronics Engineers in Israel, Tel Aviv, March 7-8, 1995.
- Invited to chair the "Parameter Estimation" Session in the 1995 International Conference on Acoustics, Speech, and Signal Processing, May 9-12, 1995, Detroit, Michigan, USA.
- **1996-1999** IEEE Israel Section, Chairman.
- **1996-1999** Dept. Electrical Engineering - Systems, Chairman.
- **1996** Chairman of The 19th Convention of Electrical and Electronics Engineers in Israel. Jerusalem, Nov. 5-6, 1996.
- **1998** Scientific Program Chairman of the 9th Mediterranean Electrotechnical Conference (MELECON '98) Tel Aviv, May 18-20, 1998.
- **1999** Member Scientific Program Committee, High Order Statistics Workshop (HOS'99), Cesarea, Israel, June, 1999.
- **2000** Member Scientific Program Committee, 10th Mediterranean Electrotechnical Conference (MELECON '2000), Cyprus, 2000.
- **2001** Chairman, Scientific Program Committee, Vehicular Technology Conference (VTC '2001), Rhodes, Greece, 2001.
- **2002** Organizing Committee of the 22nd Convention of Electrical and Electronics Engineers in Israel. Tel Aviv, Dec. 1, 2002.
- **2004** Chair scientific Committee, The 23rd Convention of Electrical and Electronics Engineers in Israel. Tel-Aviv, September 6-7, 2004.
- **2004** member of the 2004 IEEE Fellow Committee.
- **2004** Proceedings Chair, ICECS 2004, 11th IEEE International Conference on Electronics, Circuits and Systems, December 13-15, 2004, Tel-Aviv, Israel.
- **2004/2005** Chair, Electrical Engineering Teaching Committee.
- **2006** Vice Chair, The 24th Convention of Electrical and Electronics Engineers in Israel. Eilat, November 15-17, 2006.
- **2006** Scientific Committee, The 3rd IASTED International Conference on ANTENNAS, RADAR, AND WAVE PROPAGATION (ARP 2006) July 3-5, 2006 Banff, Canada.
- **2007** Scientific Committee, The 4th IASTED International Conference on ANTENNAS, RADAR, AND WAVE PROPAGATION (ARP 2007) May 30 - June 1, 2007 Montreal, Canada.
- **2008** Scientific Committee, The 5th IASTED International Conference on ANTENNAS, RADAR, AND WAVE PROPAGATION (ARP 2008) April 16 - 18, 2008, Baltimore, Maryland, USA
- **2007** Technical Program Committee of the 7th International Symposium on Communications and Information Technologies, Sydney, Australia, October 16-19, 2007.
- **2007** On The Editorial Board of EURASIP Signal Processing Journal <http://www.elsevier.com/locate/sigpro>.
- **2008** Technical committee, European Signal Processing Conference (EUSIPCO-2008) August 25-29, Lausanne, Switzerland.
- **2008** Vice Chair, 2008 IEEE 25th Convention of Electrical and Electronics Engineers in Israel, Eilat, December 3-5, 2008.

- **2009** Technical committee, European Signal Processing Conference (EUSIPCO-2009) August 24-28, Glasgow, Scotland.
- **2009** Technical committee of the International Symposium on Communications and Information Technologies (ISCIT), 28-30 September 2009, Incheon, Korea.
- **2010** Technical committee, The 7th Workshop on Positioning, Navigation and Communication 2010 (WPNC'10), Dresden, Germany, March 11, 2010.
- **2010** Vice Chair, 2010 IEEE 26th Convention of Electrical and Electronics Engineers in Israel, Eilat, November 17-20, 2010.
- **2010** Technical committee, European Signal Processing Conference (EUSIPCO-2010) August 23-27, Aalborg, Denmark.
- Editorial Advisory board The Open Signal Processing Journal [www.benthamscience.com/open/tosigpj](http://www.benthamscience.com/open/tosigpj)
- **2011** Technical committee, European Signal Processing Conference (EUSIPCO-2011) August 29-September 2, Barcelona, Spain.
- **2011** Faculty promotion committee.
- **2011** Head, International Electrical Engineering Program.
- **2012** Technical committee, European Signal Processing Conference (EUSIPCO-2012) BUCHAREST, Romania - August 27 to 31.
- **2012** Technical committee, 7th Workshop SDF 2012 Sensor Data Fusion: Trends, Solutions, Applications, Bonn, Germany, September 4-6.
- **2012** Co-Chair, 2012 IEEE 27th Convention of Electrical and Electronics Engineers in Israel, Eilat, November 14-17, 2012.
- **2013** Technical committee, 8-th Workshop SDF 2013, Sensor Data Fusion: Trends, Solutions, Applications, Bonn, Germany, October 9-11.
- **2013** Technical committee, European Signal Processing Conference (EUSIPCO-2013) Marrakech, Morocco - September 9 to 13.
- **2013** Head, Advancement and Nomination Committee, School of Electrical Engineering.
- **2014** Technical committee, 9-th Workshop SDF 2014, Sensor Data Fusion: Trends, Solutions, Applications, Bonn, Germany.
- **2015** TPC VTC2015-Fall in Boston.
- **2015** Technical committee, 10-th Workshop SDF 2015, Sensor Data Fusion: Trends, Solutions, Applications, Bonn, Germany.
- **2017** Member, Research Excellence Awards Committee, Technion, Israel Institute of Technology.
- **2017** Editor, IEEE Transactions on Wireless Communications.
- **2017** Technical committee, 11-th Workshop SDF 2017, Sensor Data Fusion: Trends, Solutions, Applications, Bonn, Germany.



## 11 Supervision of Graduate Students

### 11.1 Doctoral Students

1. Miriam A. Doron, "Direction Finding of Narrowband and Wideband Sources," Received her Ph.D. from Tel Aviv University, in 1993.
2. Motti Gavish, "Source Localization and Data Fusion From Passive Arrays," Received his Ph.D. from Tel Aviv University, in 1995.
3. Jeffery Davidson, "QAM Signals Through a Companding Channel," Received his Ph.D. from Tel Aviv University, in 1996. This research was co-supervised by Dr. Irving Kalet.
4. Jacob Sheinvald, "Advanced Array Processing Techniques for Subarray Processing," Received his Ph.D. in 1997.
5. Shalom Zruia, "Criteria and Methods for Blind Diversity Combining and Equalization in Multiuser Environments," Received his Ph.D..
6. Ori Shental, "Probabilistic Inference in Graphical Models and Statistical Mechanics for Multiple Access Communications ," Received his Ph.D.
7. Tzachi Rosenhouse, "Applications of Chaotic Signals to Communications," Received his Ph.D. in 2010.
8. Alon Amar, "Direct Position Determination Methods," Received his Ph.D. in 2009.
9. Joseph Picard, "Mitigation of Outliers in Geolocation," Ph.D. Student.
10. Oded Bialer, "Multipath mitigation in Geolocation," Ph.D. student.
11. Shimi Shiloh, "Beamforming in Communication with partial knowledge," Ph.D. student.
12. Ofer Bar Shalom, "Position Determination Methods for Single Platform Location Systems," Ph.D. student.
13. Elad Zoref
14. Caleb Leibovitz

### 11.2 Master of Science Students

#### 11.2.1 Master Thesis

1. Zvi Stein, "Optimal Below Threshold Delay Estimation for Radio Signals," Thesis submitted towards the degree of "Master of Science in Electrical Engineering" in Tel Aviv University, December 1990.
2. Joseph Tabrikian, "Calibration Performance of Array Parameters Using Static and Dynamic Sources," Thesis submitted towards the degree of "Master of Science in Electrical Engineering" in Tel Aviv University, January 1991.
3. Amir Bar-El, "Comparison of Different Time-Of-Arrival Target Location Algorithms," Thesis submitted towards the degree of "Master of Science in Electrical Engineering" in Tel Aviv University, May 1993.
4. Oz Micka, "Estimating Frequencies of Exponentials in Noise Using Joint Diagonalization," Thesis submitted towards the degree of "Master of Science in Electrical Engineering" in Tel Aviv University, Feb. 1997.

5. Avishai Moskoviz, "Means for Accelerating Image Compression."
6. Gil Shapira, "Integration of Antenna Arrays with Cellular Communications,"
7. Roy Appelman, "Smart DF Techniques."
8. Alon Amar, "Threshold effects in Estimation Problems."
9. Shaul Shulmam, "DF in the presence of Multi-path."
10. Guy Inbar, "RSS location methods."
11. Yaniv Isbi, "Accuracy of EOTD."
12. Galit Zuckerman, "Delay Estimation of known signals in multi-path."
13. Ori Yeger, "MIMO Channel Estimation."
14. Dana Lahat, "Accuracy of high order statistics for MUD."
15. Itai Lanir, "Monopulse vs. Beamforming," On going research.
16. Nir Tishbi,
17. Alit Mendelson,
18. Ori Landau,
19. Alon Sidi,
20. Daniel Avergun,
21. Noy Cohen,
22. Maor Margalit,
23. Itamar Weiss,
24. Imri Enosh,
25. Bruria Berger
26. Shai Beer
27. Yossi Steinmetz
28. Hadas Aharon
29. Yuri Katz
30. Damian Hofman
31. Ronny Zis
32. Liran Zafri
33. Shalom Elkayam
34. Haim Simkovic
35. Yossi Steinmetz
36. Eduward Shifman
37. David Refael

38. Tom Tիրրer
39. Shirly Raz
40. Liron Azrad
41. Eilon Regev
42. Ilya Poltoriak

## 12 Citations

### 12.1 Google Scholar as of May 2021

1. Sum of times cited: 11159
2. h - index: 54
3. i10 - index: 142

## 13 List of Publications

### 13.1 Articles

1. A.J. Weiss, and E. Weinstein, "Composite Bound on the Attainable Mean Square Error in Passive Time Delay Estimation," *IEEE, Transactions on Information Theory*, vol. IT-28, no. 6, pp. 977-979, November 1982.
2. A.J. Weiss, and E. Weinstein, "Fundamental Limitations in Passive Time Delay Estimation, Part I: Narrow-band Systems," *IEEE Transactions on Acoustics, Speech, and Signal-Processing*, vol. ASSP-31, no. 2, pp. 472-485, April 1983.
3. E. Weinstein, and A.J. Weiss, "Fundamental Limitations in Passive Time Delay Estimation, Part II: Wide-band Systems," *IEEE Transactions on Acoustics, Speech, and Signal-Processing*, vol. ASSP-32, no. 5, pp. 1064-1078, October 1984.
4. A.J. Weiss, and E. Weinstein, "Lower Bounds on the Mean Square Error in Random Parameter Estimation," *IEEE Transactions on Information Theory*, vol. IT-31, no. 5, pp. 680-682, September 1985.
5. E. Weinstein, and A.J. Weiss, "Lower Bounds on the Mean Square Estimation Error," *Proceedings of the IEEE*, vol. 73, no. 9, pp. 1433- 1434, September 1985.
6. A.J. Weiss, "Composite Bound on Arrival Time Estimation Errors," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-22, no. 6, pp. 751-756, November 1986.
7. A.J. Weiss, and Z. Stein, "Optimal Below Threshold Delay Estimation for Radio Signals," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-23, no. 6, pp. 726-730, November 1987.
8. A.J. Weiss, "Bounds on Time Delay Estimation for Monochromatic Signals," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-23, no. 6, pp. 798-808, November 1987.
9. A.J. Weiss, A.S. Willsky, and B.C. Levy, "Maximum Likelihood Array Processing for the Estimation of Superimposed Signals," *Proceedings of the IEEE*, vol. 76, no. 2, pp. 203-205, February 1988.
10. E. Weinstein, and A.J. Weiss, "A General Class of Lower Bounds in Parameter Estimation," *IEEE Transactions on Information Theory*, vol. IT-34, no. 2, pp. 338-342, March 1988.
11. A.J. Weiss, A.S. Willsky, and B.C. Levy, "Eigenstructure Approach for Array Processing with Unknown Intensity Coefficients," *IEEE Transactions on Acoustics, Speech, and Signal-Processing*, vol. ASSP-36, no. 10, pp. 1613-1617, October 1988.
12. A.J. Weiss, A.S. Willsky, and B.C. Levy, "Nonuniform Array Processing via the Polynomial Approach," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-25, no. 1, pp. 48-55, January 1989.
13. A.J. Weiss, and B. Friedlander, "Efficient Dynamic Programming in the Presence of Nuisance Parameters," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-25, no. 3, pp. 277-280, March 1989.

14. A.J. Weiss, and B. Friedlander, "Array Shape Calibration Using Sources in Unknown Locations - Maximum likelihood Approach," *IEEE Transactions on Acoustics, Speech, and Signal-Processing*, vol. ASSP-37, no. 12, pp. 1958-1966, December 1989.
15. A.J. Weiss, and B. Friedlander, "Eigenstructure Methods for Direction Finding with Sensor Gain and Phase Uncertainties," *Circuits Systems and Signal Processing*, vol.9, no. 3, pp. 271-300, 1990.
16. A. J. Weiss, and B. Friedlander, "Array Shape Calibration Using Eigenstructure Methods," *Signal Processing*, no. 22, pp. 251-258, 1991.
17. B. Friedlander, and A.J. Weiss, "Direction Finding in the Presence of Mutual Coupling," *IEEE Transactions on Antennas and Propagation*, vol. 39, no. 3, pp. 273-284, March 1991.
18. A. J. Weiss, and M. Gavish, "Direction Finding Using ESPRIT with Interpolated Arrays," *IEEE Transactions on Signal-Processing*, vol. 39, no. 6, pp. 1473-1478, June 1991.
19. A. J. Weiss, and B. Friedlander, "Performance Analysis of Diversely Polarized Antenna Arrays," *IEEE Transactions on Signal-Processing*, vol. 39, no. 7, pp. 1589-1603, July 1991.
20. B. Friedlander, and A. J. Weiss, "On the Number of Signals Whose Directions Can be Estimated by an Array," *IEEE Transactions on Signal-Processing*, vol. 39, no. 7, pp. 1686-1689, July 1991.
21. B. Friedlander, and A.J. Weiss, "Direction Finding for Correlated Signals Using Spatial Smoothing with Interpolated Arrays," *IEEE Transactions on Aerospace and Electronic Systems*, vol. 28, no. 2, pp. 574-587, April, 1992.
22. A.J. Weiss, and B. Friedlander, "Mutual Coupling Effects on Phase Only Direction Finding," *IEEE Transactions on Antennas and Propagation*, Vol 40, No 5, pp. 535-541, May, 1992.
23. M. A. Doron, and A. J. Weiss, "On Focusing Matrices for Wideband Array Processing," *IEEE Transactions on Signal-Processing*, vol. 40, no. 6, pp. 1295-1302, June 1992.
24. B. Friedlander, and A.J. Weiss "A Direction Finding Algorithm for Diversely Polarized Arrays," *Digital Signal Processing*, vol. 2, no. 3, pp. 123-134, July 1992.
25. M. Gavish, and A. J. Weiss, "Performance Analysis of Bearing-Only Target Location Algorithms," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-28, no. 3, pp. 817-828, July 1992.
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