

**ATEF Z. ELSHERBENI**  
**IEEE Fellow (2007) and ACES Fellow (2008)**

**Short Courses Offered: (Total 43)**

**2024**

- Atef Elsherbeni, "Accurate electromagnetics and antenna simulations using the FDTD method Time Domain Simulation of Electromagnetic Problems Combined with Linear and Nonlinear Circuit Elements," International ICEAA and IEEE APWC conferences, Lisbon, Portugal, September, 2024. **(Invited Short Course)**
- Atef Elsherbeni, "Radar Cross-Section of Complex Objects - A Computational Approach," IEEE International Telecommunications Conference – ITC, Cairo, Egypt, July 2024. **(Invited Short Course)**

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**2023**

- Atef Elsherbeni, "Accurate electromagnetics and antenna simulations using the FDTD method," International Conference on Electromagnetics in Advanced Applications" IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications, Venice, Italy, October 13, 2023. **(Invited Short Course)**

**2022**

- Atef Elsherbeni, "Recent Advances in Computational electromagnetics and their applications," Electronic Research Institute, Egypt, July 24, 2022.

**2019**

- Atef Elsherbeni, "The Finite Difference Time Domain Technique," short course Jiangsu Normal University, ACES-China conference, Nanjing, China, August 10, 2019.
- Atef Elsherbeni, "Numerical Methods based on Differential Equations", 1 day workshop, King Abdullah University for Science and Technology (Kaust), Saudi Arabia, November 25, 2019.

**2018**

- Atef Elsherbeni, "The Finite Difference Time Domain Technique," 2 days short course Jiangsu Normal University, Xuzhou, Jiangsu province, China, September 21-22, 2018.

**2017**

- Atef Elsherbeni, "Reflectarray Antennas: Theory, Designs, and Applications", 1 day workshop, King Abdullah University for Science and Technology (Kaust), Saudi Arabia, December 22, 2017.
- Atef Elsherbeni, "Numerical Techniques for Electromagnetics Applications," 3 days short course, Nanjing University, Nanjing, January 4-6, 2017.
- Atef Elsherbeni and Payam Nayeri, "Reflectarray Antenna Theory, Design, and Applications," Invited 1 day workshop, Army Research Lab, June 2017.
- Payam Nayeri, Atef Elsherbeni, and Fan Yang, "Reflectarray Antenna Theory, Design, and Applications," half day short course, IEEE International Symposium on Antennas and Propagation, San Diego, July 2017.

**2016**

- "The FDTD for Antenna Designs," Istanbul Medipol University, School of Engineering and Natural Sciences, Istanbul, Turkey, January 2016.
- "Reflectarray Antennas: Theory, Design, and applications," 2016 IEEE International Conference on APS Symposium, Puerto Rico, July 2016.

**2014**

- “Using FDTD to Efficiently Design Antennas with Emphasis on Source and Matching Circuit Implementations,” 2014 IEEE International Conference on Antenna Measurements and Applications (CAMA), Antibes Juan-les-Pins, France, November 2014.

### 2013

- “The Finite Difference Time Domain Technique for Antennas Applications,” EM Software & Systems (USA), Hampton, VA, March 2013.
- “The Finite Difference Time Domain Technique for Antennas Applications,” Harbin Engineering University, Harbin, China, December 2013.

### 2012

- “The Finite Difference Time Domain Technique for Antennas and RFID Applications,” *IEEE International Conference on Ultra-Wideband*, Syracuse, NY, U.S., Sep. 2012. (with V. Demir)

### 2011

- “The Finite Difference Time Domain Technique for Antennas and RFID Applications,” Tampere University of Technology, Tampere, Finland, May 2011.
- “GPU Acceleration of the Finite Difference Time Domain Techniques for EM Applications,” The Applied Computational Electromagnetic Society (ACES) Conference, Williamsburg, VA, March 2011. (with M. Inman)
- “The Finite Difference Time Domain Technique for Antenna Applications,” The Applied Computational Electromagnetic Society (ACES) Conference, Williamsburg, VA, March 2011. (with V. Demir)
- “The Finite Difference Time Domain Technique,” National Authority on Remote Sensing and Space Science (NARSS), Cairo, Egypt, December 2011.

### 2010

- “Efficient use of the Finite Difference Time Domain Technique for Antennas and Electromagnetic Applications,” 2010 IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE 2010), Port Dickson, Malaysia, 9-11 November 2010.
- “GPU Acceleration of the Finite Difference Time Domain Techniques for EM Applications,” The Applied Computational Electromagnetic Society (ACES) Conference, Tampere, Finland, April 2010. (with M. Inman)

### 2009

- “The Finite Difference Time Domain Technique,” National Authority on Remote Sensing and Space Science (NARSS), Cairo, Egypt, May 2009.
- “GPU Acceleration of the Finite Difference Time Domain Techniques for EM Applications,” The Applied Computational Electromagnetic Society (ACES) Conference, Monterey, March 2009. (with M. Inman)

### 2007

- “The Finite Difference Techniques for EM Applications,” Hong Kong, November 2007.
- “The Iterative Multi Region Technique for Electromagnetic Scattering from Large Scale Problems,” The Applied Computational Electromagnetic Society (ACES) Conference, Verona, Italy, March 2007.

### 2005

- “The Finite Difference Techniques for EM Applications,” Syracuse University, Syracuse, NY, July 2005.
- “The Finite Difference Techniques for Antenna Applications,” Magdeburg University, Germany, May 2005.
- “Wideband Antennas,” The IEEE/Applied Computational Electromagnetic Society (ACES) Conference, Honolulu, Hawaii, April 2005.



- “Finite Difference Techniques for Antenna Applications,” The Electronics Research Institute, Cairo, Egypt, January, 2005.

### 2004

- “The Finite Difference Time Domain for Electromagnetic Applications,” The Applied Computational Electromagnetic Society (ACES) Conference, Syracuse, NY, April 2004.

### 2003

- “Analysis and Design of Printed and Slot Antennas for Radar Applications,” The Institute of Electrical and Electronic Engineers (IEEE) Radar Conference, Huntsville, AL, May 2003.
- “Workshop on Antenna Analysis and Design Using The FDTD Technique,” The Applied Computational Electromagnetic Society (ACES) Conference, Monterey, March 2003. (with Dr. A.W. Glisson)
- “The Finite Difference Time Domain for Electromagnetic Applications,” The Applied Computational Electromagnetic Society (ACES) Conference, Monterey, March 2003. (with Dr. A.W. Glisson)

### 2002

- “High Speed Connector Design Fundamentals,” Cinch, August 2002. (with Dr. D. Kajfez)
- “The Finite Difference Time Domain Technique and Its Applications,” The Applied Computational Electromagnetic Society (ACES) Conference, Monterey, March 2002. (with Dr. A.W. Glisson)

### 2001

- “Analysis and Design of Microstrip Antennas using the FDTD Technique,” The Electronics Research Institute, Cairo, Egypt, September 2001.
- “Vector Network Analyzer Measurements,” The University of Mississippi, Electrical Engineering Department, September 6-7, 2001. (with Dr. D. Kajfez, and Dr. C. E. Smith)
- “The Finite Difference Time Domain Technique and Its Applications,” The Applied Computational Electromagnetic Society (ACES) Conference, Monterey, March 2001. (with Dr. A.W. Glisson)

### 2000

- “The Basics of The Finite Difference Time Domain Technique for Electromagnetic Applications,” The Applied Computational Electromagnetic Society (ACES) Conference, Monterey, March 2000. (with Dr. A.W. Glisson)

### 1999

- “The FDTD Technique and its Applications,” The Electronics Research Institute, Cairo, Egypt, June 1999.

### 1997

- “Introduction to FDTD and its Applications,” The Electronics, Circuits, and Systems Conference, Cairo, Egypt, December 1997.