

# **Education News**

## 2022 IEEE MTT-S Webinar Schedule

■ Xun Gong, Michael C. Hamilton, Rashaunda Henderson, and Robert H. Caverly

he IEEE Microwave Theory and Techniques Society (MTT-S) Education Committee continues to offer high-quality webinars from experts in their respective fields, a series that began in 2016 [1]-[5]. These webinars have continued through 2021 in spite of pandemic restrictions and provided collaborative learning opportunities to our MTT-S members as well as the global microwave/RF community. The Education Committee is grateful to the webinar speakers for their efforts in preparing and delivering cutting-edge educational content through our popular MTT-S webinar series. This month's "Education News" column presents the current webinars scheduled for the first half of 2022, which can be found in

Xun Gong (Xun.Gong@ucf.edu) is with the University of Central Florida, Orlando, Florida, 32816, USA. Michael C. Hamilton (mchamilton@auburn.edu) is with Auburn University, Auburn, Alabama, 36849, USA. Rashaunda Henderson (rmh072000@ utdallas.edu) is with the University of Texas at Dallas, Richardson, Texas, 75080, USA. Robert H. Caverly (r.caverly@villanova. edu) is with Villanova University, Villanova, Pennsylvania, 19085, USA. Digital Object Identifier 10.1109/MMM.2021.3117310

Date of current version: 2 December 2021

Table 1. The webinar speakers represent a diverse group of leading subject matter experts from around the

globe, including current and emeritus Distinguished Microwave Lecturers. The previous webinars, as



#### TABLE 1. IEEE MTT-S Webinars: First Half of 2022.

2022 Webinar			
Date	Webinar Title	Presenter	Affiliation
11 January	"Technology Enablers That Advance 21st Century Applications in mm-Wave Communications and Nanomedicine"	Dr. Rhonda Franklin	University of Minnesota
8 February	"Security for Radar Sensors: Attacks and Risk Mitigation"	Dr. Changzhi Li	Texas Tech. University
8 March	"Phase Change Material (PCM) Switches and Their Microwave and Millimeter-Wave Applications"	Dr. Raafat Mansour	University of Waterloo
12 April	"Emerging Substrate Integrated Circuits and Systems"	Dr. Kaixue Ma	Tianjin University
10 May	"Silicon-Based mm-Wave Phased Arrays for 5G: Fundamentals to Future Trends"	Dr. Bodhisatwa Sadhu	IBM T.J. Watson Research Center
14 June	"Reconfigurable Acoustic-Wave- Resonator-Based RF Filtering Architectures for the Next Generation of Multifunctional Wireless Systems"	Dr. Dimitra Psychogiou	University College Cork

well as other Societyrelated resources, can be found at the MTT-S Resource Center, https:// resourcecenter.mtt.ieee .org/. Viewing previous MTT-S webinars is free for Society members. IEEE professional development hours are also available.

If you would like to be considered as a webinar speaker and

present a topic of current interest to the MTT-S community in the 2022 webinar

This month's "Education News" column presents the current webinars scheduled for the first half of 2022, which can be found in Table 1. series, please send an email to Xun Gong (xun .gong@ucf.edu), outlining your topic and providing a brief abstract, biography, and sample slides.

#### References

[1] R. K. Gupta and M. Hamilton, "MTT-S Education Committee launches successful 2016 Webinar Series [Education News]," *IEEE Microw. Mag.*, vol. 17, no. 11, pp. 84–91,

Nov. 2016. doi: 10.1109/MMM.2016.2601539. [2] R. K. Gupta and M. C. Hamilton, "MTT-S 2017

Webinar Series—Another successful year of col-

laborative learning [Education News]," *IEEE Microw. Mag.*, vol. 19, no. 2, pp. 100–101, Mar.–Apr. 2018. doi: 10.1109/MMM.2017.2781159.

- [3] R. K. Gupta and M. C. Hamilton, "IEEE MTT-S 2018 Webinar Series: Speaker biographies and webinar abstracts [Education News]," *IEEE Microw. Mag.*, vol. 20, no. 3, pp. 93–100, Mar. 2019. doi: 10.1109/MMM.2018.2885672.
- [4] M. C. Hamilton, R. Henderson, and R. Caverly, "MTT-S webinars scheduled for May–December 2021 [Education News]," *IEEE Microw. Mag.*, vol. 22, no. 5, pp. 114–124, May 2021. doi: 10.1109/MMM.2021.3056978.
- [5] R. H. Caverly, M. C. Hamilton, and R. Henderson, "Continuing our IEEE MTT-S webinar series [Education News]," *IEEE Microw. Mag.*, vol. 22, no. 2, pp. 72–74, Feb. 2021. doi: 10.1109/ MMM.2020.3037386.

NN.

### Application Notes (continued from page 67)

- [28] S. Maity, R. Ghosal, M. Gangopadhyaya, and B. Gupta, "The complete modal chart of CDWG," *IET Electron. Lett.*, vol. 54, no. 19, pp. 1134–1135, Sept. 2018. doi: 10.1049/ el.2018.5871.
- [29] R. K. Mongia and P. Bhartia, "Dielectric resonator antennas—A review and general design relations for resonant frequency and bandwidth," Int. J. Microw. Millim.-Wave Comput.-Aided Eng, vol. 4, no. 3, pp. 230–247, 1994. doi: 10.1002/mmce.4570040304.
- [30] K. M. Luk and K. W. Leung, *Dielectric Resonator Antennas*. Baldock: Research Studies Press Ltd., 2003.
- [31] High Frequency Structured Simulator. Canonsburg, PA, USA: Ansoft, 2016. Accessed: Oct. 9, 2021. [Online]. Available: https://www.ansys .com/en-in/products/electronics/ansys-hfss
- [32] Computer Simulation Technology, CST Microwave Studio Suite, Darmstadt, Germany, 2020. Accessed: Oct. 19, 2021. [Online]. Available: https://www.cst.com/products/CSTMWS/
- [33] D. Guha, P. Gupta, and C. Kumar, "Dual band cylindrical dielectric resonator antenna employing *HEM*<sub>11δ</sub> and *HEM*<sub>12δ</sub> modes excited by new composite aperture," *IEEE Trans. Antennas Propag.*, vol. 63, no. 1, pp. 433–438, Jan. 2015. doi: 10.1109/TAP.2014.2368116.
- [34] A. Petosa, Dielectric Resonator Antenna Handbook. Norwood, MA: Artech House, 2007.

- [35] R. K. Mongia, A. Ittipiboon, and M. Cuhaci, "Measurement of radiation efficiency of dielectric resonator antennas," *IEEE Microw. Guided Wave Lett.*, vol. 4, no. 3, pp. 80–82, 1994. doi: 10.1109/75.275587.
- [36] R. K. Mongia, C. L. Larose, S. R. Mishra, and P. Bhartia, "Measurement of RCS of cylindrical and rectangular dielectric resonators," *Electron. Lett.*, vol. 28, no. 21, pp. 1953–1955, 1992. doi: 10.1049/el:19921252.
- [37] G. P. Junker, A. A. Kishk, and A. W. Glisson, "Input impedance of dielectric resonator antennas excited by a coaxial probe," *IEEE Trans. Antennas Propag.*, vol. 42, no. 7, pp. 960–966, 1994. doi: 10.1109/8.299598.
- [38] A. A. Kishk, A. Ittipiboon, Y. M. M. Antar, and M. Cuhaci, "Slot excitation of the dielectric disk radiator," *IEEE Trans. Antennas Propag.*, vol. 43, no. 2, pp. 198–201, 1995. doi: 10.1109/8.366382.
- [39] D. Kajfez, A. W. Glisson, and J. James, "Computed modal field distributions for isolated dielectric resonators," *IEEE Trans. Microw. Theory Techn.*, vol. 32, no. 12, pp. 1609–1616, Dec. 1984. doi: 10.1109/TMTT.1984.1132900.
- [40] G. Almpanis, C. Fumeaux, and R. Vahldieck, "Offset cross-slot-coupled dielectric resonator antenna for circular polarization," *IEEE Microw. Compon. Lett.*, vol. 16, no. 8, pp. 461–463, Aug. 2006. doi: 10.1109/LMWC.2006.879484.

- [41] L. Zou, D. Abbott, and C. Fumeaux, "Omnidirectional cylindrical dielectric resonator antenna with dual polarization," *IEEE Antennas Wireless Propag. Lett.*, vol. 11, pp. 515–518, May 2012. doi: 10.1109/LAWP.2012.2199277.
- [42] W. W. Li and K. W. Leung, "Omnidirectional circularly polarized dielectric resonator antenna with top-loaded alford loop for pattern diversity design," *IEEE Trans. Antennas Propag.*, vol. 61, no. 8, pp. 4246–4256, Aug. 2013. doi: 10.1109/TAP.2013.2262072.
- [43] X. S. Fang and K. W. Leung, "Linear-/ circular-polarization designs of dual-/wideband cylindrical dielectric resonator antennas," *IEEE Trans. Antennas Propag.*, vol. 60, no. 6, pp. 2662–2671, June 2012. doi: 10.1109/ TAP.2012.2194682.
- [44] R. K. Mongia, C. L. Larose, S. R. Mishra, and P. Bhartia, "Accurate measurement of Qfactors of isolated dielectric resonators," *IEEE Trans. Microw. Theory Techn.*, vol. 42, no. 8, pp. 1463–1467, Aug. 1994. doi: 10.1109/22.297807.
- [45] D. Guha, A. Banerjee, C. Kumar, and Y. M. M. Antar, "Higher order mode excitation for high-gain broadside radiation from cylindrical dielectric resonator antennas," *IEEE Trans. Antennas Propag.*, vol. 60, no. 1, pp. 71–77, Jan. 2012. doi: 10.1109/TAP.2011.2167922.

M.