

International academic presentations in Canada, Colombia, England, France, Italy, Mexico and Spain

More than 100 presentations in U.S.A., Mexico and Central America

Publications indexed in Journal Citation Report (JCR), Scopus and international journals with peer review.

- Nov. 2021 Directive Multiband Antenna Based on Rectangular Loop Array and Dumbbell-Shaped Slot Radiator. Tirado-Mendez, J.A.; Jardon-Aguilar, H.; Flores-Leal, R.; Vasquez-Toledo, L.A.; Rangel-Merino, A.; Marcelin-Jimenez, R.; Rodriguez-Colina, E.; Pascoe-Chalke, M. *Sensors* 2021, 21, 7082. <https://doi.org/10.3390/s21217082> ISSN: 1424-8220 Impact Factor: 3.576. 26 October 2021
- Jul. 2021 Function Composition from Sine Function and Skew Tent Map and Its Application to Pseudorandom Number Generators., L. Palacios-Luengas, Ricardo Marcelín Jiménez, **Enrique Rodríguez-Colina**, Ruben Vazquez-Medina *Applied Sciences* ISSN: 2076-3417 Impact Factor: 2.679 (2020) DOI: [10.3390/app11135769](https://doi.org/10.3390/app11135769) *Appl. Sci.* 2021, 11(13), 5769;
- Oct. 2020 System Design for Opportunistic Spectrum Access Using Statistical Decision-Making and Coded-MAC, **Rodríguez-Colina, Enrique**, Marcelín-Jiménez, Ricardo, Palacios-Luengas, Leonardo, Pascoe-Chalke, Michael, 2020/10/23, Vol. 2020 <https://doi.org/10.1155/2020/8816760>, *Wireless Communications and Mobile Computing PB - Hindawi*. Print ISSN: 1530-8669 Online ISSN: 1530-8677 Impact Factor: 1.899 JCR(Q1).
- Oct. 2020 Caracterización de emulación de usuario primario en redes móviles de radio cognitiva. “Primary user emulation characterization in mobile cognitive radio networks, Ernesto Cadena-Muñoz, Luis Fernando Pedraza-Martínez, **Enrique Rodríguez-Colina**, *Latindex Vision Electronica*. <https://doi.org/10.14483/issn.2248-4728>, ISSN 1909-9746, ISSN-E 2248-4728
- Sept. 2020 Spectrum Decision-Making in Collaborative Cognitive Radio Networks, Giral, D.; Hernández, C.; **Rodríguez-Colina, E.**; *Spectrum. Appl. Sci.* 2020, 10(19), 6786; ISSN 2076-3417, DOI: <https://doi.org/10.3390/app10196786> Impact Factor 2.47 JCR(Q1).
- Sept. 2020 On the Complexity and Performance of the Information Dispersal Algorithm, R. Marcelín-Jiménez, J. L. Ramírez-Ortíz, **E. Rodríguez-Colina**, M. Pascoe-Chalke and J. L. González-Compeán., in *IEEE Access*, doi: 10.1109/ACCESS.2020.3020501. Print ISSN: 2169-3536; Online ISSN: 2169-3536 JCR. in *IEEE Access*, vol. 8, pp. 159284-159290, 2020, Impact Factor 3.745 JCR(Q1).
- Aug. 2020 Mathematical analysis of highly scalable cognitive radio systems using hybrid game and queuing theory, L.A. Vasquez-Toledo, B. Borja-Benítez, R. Marcelin-Jiménez, **E. Rodríguez-Colina**, y J.A.Tirado-Mendez, *Elsevier AEU - International Journal of Electronics and Communications*, vol. 127, 2020, ISSN: 1434-8411 eISSN: 1618-0399. DOI=<http://dx.doi.org/10.1016/J.Aeue.2020.153406>. Journal Impact Factor 2.93
- Dec. 2019 Detection of dynamic location primary user emulation on mobile cognitive radio networks using USRP” Ernesto Cadena-Muñoz, **Enrique Rodríguez-Colina**, Luis Fernando-Pedraza, y Ingrid P. Paez-Parra, *EURASIP Journal on Wireless Communications and Networking*, (JCR) SpringerOpen, ISSN 16871472; eISSN 16871499
- Aug. 2018 Dynamic OFDM transmission for a cognitive radio device based on a neural network and multiresolution analysis, **Enrique Rodríguez-Colina**, Cesar A. Hernández, Luis Pedraza, Miguel Lopez-Guerrero, and Alfonso Prieto-Guerrero, *Wireless Communications and Mobile Computing*, Hindawi, e-ISSN: 1530-8677 (JCR) Journal Citation Report, Web of Science (Thomson Reuters). Received 16 February 2018; Revised 4 June 2018; Accepted 27 June 2018, published August 2018 .

- Jan. 2017 Multivariable Adaptive Handoff Spectral Model for Cognitive Radio Networks, Luis Pedraza, Cesar Hernandez, **Enrique Rodriguez-Colina**, Contemporary Engineering Sciences, Vol. 10, 2017, no. 2, 39 - 72 HIKARI Ltd, www.m-hikari.com; <https://doi.org/10.12988/ces.2017.69154>, ISSN-e: 1314-7641
- Jan. 2017 Fuzzy feedback algorithm for the spectral handoff in cognitive radio networks (Algoritmo difuso realimentado para handoff espectral en redes de radio cognitivas), César Augusto Hernández-Suárez, Luis Fernando Pedraza-Martínez, **Enrique Rodríguez de la Colina**, Revista Facultad de Ingeniería, Universidad de Antioquia, No. 80, pp. 47-62, 2016, DOI: 10.17533/udea.redin.n81a05, ISSN: 0120-6230, (JCR) Journal Citation Report, Web of Science (Thomson Reuters) e-ISSN: 2422-2844, aceptado en línea septiembre 2016, publicado impreso enero 2017
- Ene. 2017 Analysis of Reconfigurable Platforms for Security Architectures in Software-Radio Applications, Ignacio Algreto-Badillo, Luis Alberto Morales Rosales, Miguel Morales-Sandoval, Ernesto Cortés-Pérez, **Enrique Rodriguez-Colina**, Abel Garcia-Barrientos, International Journal of Computer Science and Information Security (IJCSIS), ISSN: 1947-5500, aceptado diciembre 2016, publicado enero 2017
- Dic. 2016 Linear Algorithms for Radioelectric Spectrum Forecast, Luis Pedraza, Cesar Hernandez, Ingrid Paez, Jorge Ortiz, **Enrique Rodriguez-Colina**, Revista Algorithms 9(4):82 • DOI: 10.3390/a9040082, Publicado December 2016 ISSN: 0196-6774
- Nov. 2016 Study of models to forecast the radioelectric spectrum occupancy, Luis F. Pedraza, Cesar A. Hernandez, **E. Rodriguez-Colina**, Revista Indian Journal of Science and Technology; (JCR) Journal Citation Report expanded, ISSN: 0974-6846, aceptado noviembre 2016
- Feb. 2016 Performance Trade-Offs for Wavelength Striping Optical Switching Using a Novel Star Architecture, **Enrique Rodriguez-Colina**, Michael Pascoe-Chalke, Miguel Lopez-Guerrero, Revista Advances in Optical Technologies, *Science Citation Index (JCR)*, DOI: 10.1155/2016/1875357; 1-12 • Feb. 2016
- Dic. 2015 *Análisis de la Movilidad Espectral en Redes de Radio Cognitiva*, Cesar Hernandez, Luis Pedraza, Ingrid Páez, **E. Rodriguez-Colina**, Revista Información tecnológica. Vol. 26(6), 1 69 – 1 86 (2015) doi: 10.4067/S0718 – 0764201500060001 8, Latindex, Scopus; <http://www.citrevistas.cl>. Versión On-line ISSN 0718-0764. Publicado 12/2015
- Aug. 2015 C. Salgado, H. López, Cesar Hernandez, **E. Rodriguez-Colina**, “Multivariable algorithm for dynamic channel selection in cognitive radio networks,” in *EURASIP Journal on Wireless Communications and Networking (EURASIP JWCN)*, *Science Citation Index (JCR)*, ISSN: 1687-1499
- Aug. 2014 **E. Rodriguez-Colina**, D. Gil-Leyva, J. L. Marzo, V. Ramos Ramos, “A Bit Error Rate Analysis for TCP traffic over Parallel Free Space Photonics,” in *Telecommunication Systems Journal (TSMJ)*, *Science Citation Index (JCR)*, ISSN: 1018-4864, Online ISSN: 1572-9451. Vol. 56:4 Page 455-466, 2014, - DOI: 10.1007/s11235-013-9764-4
- Aug. 2014 D. Aguirre-Guerrero, R. Marcelín-Jiménez, **E. Rodriguez-Colina**, M. Pascoe-Chalke, “Congestion Control for a Fair Packet Delivery in WSN: From a Complex System Perspective,” in *The Scientific World Journal*, *Science Citation Index (JCR)*, *Impact Factor: 1.73*, Hindawi Publishing Corporation, 08/2014; 2014 (2014):1-
- Mar. 2014 R. Marcelín-Jiménez, **E. Rodriguez-Colina**, M. Pascoe-Chalke, C. Moreno-Escobar, J. L. Marzo “Cluster-based Localisation Method for Dense WSN: A Distributed Balance between Accuracy and Complexity Fixed by Cluster Size,” in *Journal of Distributed Sensor Networks*, *Science Citation Index (JCR)*, Hindawi Publishing
- Mar. 2014 M. Pascoe, J. Gomez, V. Bonilla, M. Lopez-Guerrero, V. Rangel and **E. Rodriguez-Colina**, “Direction of Encounter (DoE): A Mobility-Based Location Method for Wireless Networks,” *IEEE Journal of Transactions on Mobile Computing*, - *Science Citation Index (JCR)*, ISSN: 1536- 1233, Vol.: 13, Issue: 11, pp. 2524 – 2536,
- Nov. 2014 **E. Rodriguez-Colina**, M. López Villaseñor, O. Gandarilla Carrillo, “Monitorización y apuntamiento para radios cognitivos mediante dispositivos autónomos,” in: *Revista Visión Electrónica*, ISSN 1909-9746, Vol. 13, año 8, enero-junio, 2014, *Latindex & Ulrich Index*.
- Nov. 2014 Laura Méndez Martínez, **Enrique Rodriguez-Colina**, R. Carolina Medina Ramírez, “Toma de decisiones basadas en el Algoritmo de Dijkstra - Una Solución para Radios Cognitivos -,” in: *Revista Redes de Ingeniería*, ISSN 2248-762X, Vol. 4, número 2, 2014, *Latindex*

Proceedings Conferences and seminars

- Nov. 2019 Caracterización de Emulación de Usuario Primario en Redes Móviles de Radio Cognitiva. Characterization in Mobile Cognitive Radio Networks. Ernesto Cadena Muñoz, Luis Fernando Pedraza, Enrique Rodríguez-Colina, Ingrid Patricia Paez, Congreso Internacional de Electrónica, Control, Y Telecomunicaciones Bogotá, Colombia. 2019.
- Nov. 2015 Salvador Perez-Salgado, **Enrique Rodríguez-Colina**, “Energy-Efficient Model for Overlay Cognitive Communications,” in *ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MsWiM 2015)*, Cancun, México.
- Nov. 2014 Luis F Pedraza, Cesar Augusto Hernández, **E. Rodríguez-Colina**, “Modeling of GSM Spectrum Based on Seasonal ARIMA model,” in *Workshop IEEE Latin-American Conference on Communications (LATINCOM)* in Cartagena de Indias, Colombia.
- Jul. 2013 Salvador Perez-Salgado, **Enrique Rodríguez-Colina**, Michael Pascoe-Chalke, Alfonso Prieto-Guerrero, “Underlay Control Channel using Adaptive Hybrid Spread Spectrum Techniques for Dynamic Spectrum Access,” IEEE (SPECTS) International Symposium on Performance Evaluation of Computer and Telecommunication Systems, en Toronto, Canadá
- Jul. 2013 D. Aguirre Guerrero, R. Marcelín Jiménez, **E. Rodríguez-Colina**, “WSN Simulation Model with a Complex Systems Approach,” SummerSim'13, Summer Computer Simulation Conference (SCSC' 13), Toronto, ON, Canadá
- Nov. 2012 J. Hernández-Guillen, **E. Rodríguez-Colina**, R. Marcelín-Jiménez, M. Pascoe Chalke, *CRUAM-MAC: A Novel Cognitive Radio MAC protocol for Dynamic Spectrum Allocation*, IEEE Latin-American Conference on Communications (LATINCOM) en Cuenca, Ecuador
- Aug. 2012 Emilio Olvera-Ochoa, Víctor Ramos, **Enrique Rodríguez-Colina**. *ACI-EDCA: a hybrid mechanism to provide QoS to multimedia traffic in WLANs*, en IEEE International Symposium on Wireless Communication Systems, en Paris, Francia
- May. 2012 **Enrique Rodríguez-Colina**, Víctor-M. Ramos-R., Gerardo Laguna-Sanchez, *Cross Layer Analysis for a Dynamic Spectrum Allocation System*, IEEE (WEA) Workshop on Engineering Applications, en Bogotá, Colombia
- Oct. 2011 Carlos Moreno-Escobar, Ricardo Marcelín-Jiménez, **Enrique Rodríguez-Colina**, Michael Pascoe-Chalke, *A Distributed Cluster-Based Localization Method for Wireless Sensor Networks*, International Conference on Systems and Networks Communications (ICSNC), IEEE - IARIA, en Barcelona, España
- Oct. 2011 Gerardo A. Laguna-Sanchez, Alfonso Prieto-Guerrero, **E. Rodríguez-Colina**, *Speedup simulation for OFDM over PLC channel using a multithreading GPU*, en IEEE Latin-American Conference on Communications (LATINCOM), en Belem, Brasil
- May. 2011 **E. Rodríguez-Colina**, C. Ramirez P. and C. Ernesto Carrillo A., *Multiple Attribute Dynamic Spectrum Decision Making for Cognitive Radio Networks*, en IEEE and IFIP International Conference on Wireless and Optical Communications Networks (WOCN), pag.: 1 – 5, en Paris, Francia
- May. 2010 Nicolás Bolívar, J. L. Marzo, **E. Rodríguez-Colina**, *Distributed Control using Cognitive Pilot Channels in a Centralized Cognitive Radio Network*, en IEEE Advanced International Conference on Telecommunications (AICT), en St. Maarten, Antillas Holandesas
- Jul. 2006 **E. Rodríguez-Colina**, A.W. Moore, M. Glick, A. Wonfor, I. H. White, R. V. Penty, *BER Implication for TCP/IP Network Throughput over a 10x10Gbps Wavelength-Striping Cascaded SOA-Switch*, IEEE London Communications Symposium, en Londres, Inglaterra
- Jun. 2006 **E. Rodríguez-Colina**, I. H. White, R.V. Penty, *WISDOM: Wavelength Interconnection Striping of Data in an Optical Model*, Symposium of Mexican Students & Studies, University of Nottingham, Inglaterra
- Apr. 2006 **E. Rodríguez-Colina**, K.A. Williams, A.W. Moore, L.B. James, R.V. Penty, I.H. White, *TCP Sending Rate Control at Terabits per second - High-Speed Networking*, IEEE International Conference on Computer Communications (INFOCOM), **Artículo indizado en SCImago Journal & Country Rank (SJR), U.S.A.** y en el “Institution of Engineering and Technology (IET) Inspec”
- Oct. 2003 **E. Rodríguez-Colina** y R. P. Popnikolov, “Un método para aumentar la seguridad de la información en las redes TCP/IP, usando tarjetas inteligentes”, en el 2º. Congreso Iberoamericano de Informática y Seguridad, Ciudad de México, México

Oct. 1994 O. Amin, **E. Rodríguez-Colina**, R. Quijano Z., O. Juárez V., *Algebra de Reed-Müller con aplicación en los circuitos digitales*, XVI Congreso Nacional Académico de Ingeniería Electrónica en Chihuahua, México

Academic Presentations

- Nov. 2021 *In Spanish “Sistemas Basados en Radios Programables (SDR) ’Soluciones para mejorar la conectividad.”* **ponente por invitación**, Enrique Rodríguez-Colina, presentado en: Congreso Internacional de Electrónica, Control y Telecomunicaciones (IX CIECT), Bogotá, Colombia
- Nov. 2013 *In Spanish “Monitoring, coding and decision making on cognitive radios”* **ponente por invitación**, Enrique Rodríguez-Colina, presentado en: IX Congreso Internacional de Electrónica, Control y Telecomunicaciones (IX CIECT) ISBN: 978-958-44-5254-2 Vol. 5, Bogotá, Colombia
- Sep. 2013 *In Spanish 10° Coloquio de Nacional de Códigos y Criptografía y Áreas Relacionadas, Applications for cognitive radios with codes for expanded spectrum and cryptographic security”*, E. Rodríguez de la Colina, **4 hours lecture by invitation**
- Jul. 2013 *“Underlay Control Channel using Adaptive Hybrid Spread Spectrum Techniques for Dynamic Spectrum Access,”* Salvador Perez-Salgado, Enrique Rodríguez-Colina, Michael Pascoe-Chalke, Alfonso Prieto-Guerrero, IEEE (SPECTS) International Symposium on Performance Evaluation of Computer and Telecommunication Systems, en Toronto, Canadá
- Jul. 2013 *“WSN Simulation Model with a Complex Systems Approach,”* D. Aguirre Guerrero, R. Marcelín Jiménez, E. Rodríguez-Colina, SummerSim'13, Summer Computer Simulation Conference (SCSC'13), Toronto, ON, Canadá
- Apr. 2013 *Yuri’s Night Mexico 2013*, E. Rodríguez de la Colina participación en la charla “El espacio y la Tecnología”, además de la exposición de posters y fotografías montada en la UAM Iztapalapa
- May. 2012 *‘Guest Lecturer’, Tutorial “Cross Layer Analysis for a Dynamic Spectrum Allocation System”*, IEEE Workshop on Engineering Applications, en Bogotá, Colombia
- Oct. 2011 *A Distributed Cluster-Based Localization Method for Wireless Sensor Networks*, International Conference on Systems and Networks Communications (ICSNC), IEEE IARIA, en Barcelona, España
- Oct. 2011 *Overcoming EPC Class 1 Gen 2 RFID limitations with p-persistent CSMA*, presentado en International Conference on Systems and Networks Communications (ICSNC), IEEE IARIA, en Barcelona, España
- Oct. 2011 *Fault-tolerant Distributed Discrete Event Simulator Based on a P2P Architecture, SoftNet*, presentado en International Conference on Systems and Networks Communications (SIMUL), IEEE IARIA, en Barcelona, España

Books (in Spanish)

- 2016 SPECTRAL OCCUPATION AND COGNITIVE RADIO MODEL FOR THE CITY OF BOGOTÁ, Luis Fernando Pedraza Martínez, Cesar Augusto Hernández Suarez, Katherine Johanna Galeano Romero, **Enrique Rodríguez de la Colina**, Ingrid Patricia Páez. Editorial de Centro de Investigaciones y Desarrollo Científico de la Universidad Distrital “Francisco José de Caldas” Bogotá Colombia. ISBN: 978-958-8897-88-2
- 2014 To understand information and communications technologies (or the strange case of the girl in the hat), Gerardo Laguna Sánchez, Ricardo Marcelín Jiménez, Miguel López Guerrero, Mauricio López Villaseñor, Enrique Rodríguez de la Colina y Michael Pascoe Chalke., Editorial Divisional de CBI, UAM-I, CBI-DIE (Textbook), junio, 26 (2013).