

## CURRICULUM VITAE

**NAME:** GEORGE TSOULOS  
Associate Professor  
Vice Rector for Research & Development

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### EDUCATION

***PhD degree (1997):*** (*University of Bristol, Department of Electrical Engineering, Bristol, UK*). PhD Thesis Title: ‘Smart Antennas for Third Generation Wireless Personal Communications’. Funded by the Centre for Communications Research of the University of Bristol, the CEC under the R&D project RACE TSUNAMI I and the UK operator ORANGE PCS.

***First Degree (1992):*** (*National Technical University of Athens, School of Electrical and Computer Engineering; Division Electronics*). Final year thesis: “Theory and Applications of Spread Spectrum Modulation; Modem Implementation with the Direct Sequence Spread Spectrum Technique and Measurements”, (Mobile Radiocommunications Laboratory).

### PROFESSIONAL CAREER

#### **CURRENT POSITION (*SINCE FEB. 2005*): UNIVERSITY OF PELOPONNESE, DEPARTMENT OF INFORMATICS & TELECOMMUNICATIONS**

- Vice Rector for R&D and President of the Research Committee (Oct. 2013).
- Director of the MSc 'Advanced Telecommunication Systems & Networks' (Feb. 2014).
- Director of the Wireless & Mobile Communications Lab (<http://wmclab.uop.gr>).
- Member of the Academic Board of the MSc Space Science, Technology & Applications (2014)

#### **- Research Interests**

- Advanced Wireless Radio Communication Systems & Architectures
- Smart Antennas and MIMO-MAMI Systems
- Radio Network Planning
- Radiowave Propagation and Measurements
- UAV wireless applications & THz communication systems

#### *Recent Research projects:*

- Nomadic Node Relays for Wireless Communications, Huawei Technologies, May 2015.
- Novel Transmit and Design Techniques for Broadband Wireless Networks (MIS 379489), co-financed by the European Union (European Social Fund ESF) and the Greek National

Funds through the Operational Program Education and Lifelong Learning of the National Strategic Reference Framework (NSRF)-Research Funding Program (2012-2015, 4 university partners, total 511.611 €, 122.190 € for WMCLAB).

Role: Key proposer and leader of the wmclab team.

#### **- Teaching**

##### Undergraduate:

- 1/ Antennas, with lab (3<sup>rd</sup> year)
- 2/ Wireless & Mobile Communications (3<sup>rd</sup> year)
- 3/ Introduction to Communications, with lab (2<sup>nd</sup> year)
- 3/ Modern Cellular Communication systems (3<sup>rd</sup> year)
- 4/ Radar systems (4<sup>th</sup> year)
- 6/ Electromagnetic Fields (2<sup>nd</sup> year)
- 7/ Wireless Links, with lab (3<sup>rd</sup> year)

##### Postgraduate:

a/ *MSc Advanced Telecommunication Systems and Networks (2/2009)*

- 1/ Wireless & Mobile Communications
- 2/ Advanced Topics on Antennas and Propagation (with lab)

b/ *MSc Space Science, Technology & Applications (10/2015)*

- 1/ Satellite Communications
- 2/ Satellite Systems and Networks

##### Lifelong Education Seminars:

Wireless Broadband Networks and Services (July/September/November 2015)

#### **- Research Excellence**

The article 'The effects of antenna array size and back lobe level on self-interference and transmitted powers of 4g beamforming multicell systems with in-band full duplex relays', was finalist for Best Paper Award at the 9th EUCAP, Lisbon, Portugal, 12-17 April 2015.

#### **2004 - TODAY: HELLENIC OPEN UNIVERSITY, SCHOOL OF SCIENCE & TECHNOLOGY**

Undergraduate course 'Fundamental issues of Computer Networks' (a/ Digital Communications, b/ Networks, c/ Information theory and Coding), 2<sup>nd</sup> year.

#### **2006 - 2014: NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, FACULTY OF INFORMATICS & TELECOMMUNICATIONS**

Joint supervision of a PhD student (D. Kontaxis) on MIMO systems.

#### **MARCH 2003 - JUNE 2009: SENIOR RESEARCHER, NATIONAL TECHNICAL UNIVERSITY OF ATHENS, SCHOOL OF ELECTRICAL & COMPUTER ENGINEERING, MICROWAVE & FIBER OPTICS LAB**

1. *Design and Analysis of 3<sup>rd</sup> generation mobile communication systems with smart antennas*, program ENTER, 20 months (1/5/2003-30/11/2004), 70.514 € CEC funded. Role: Proposer and leading expert.

2. *Advanced wireless communication MIMO systems*, PENED 2003, 3.5 years (11/2005-06/2009), 225.456 € CEC funded, *included 4 PhDs*. Role: Proposer and leading expert.

Also contributed in the following proposals:

- ACE (Antenna Centre of Excellence), IST 6<sup>th</sup> framework
- ACE2 (Antenna Centre of Excellence), IST 6<sup>th</sup> framework
- Leykippos (Research program, NTUA)
- Karatheodwris (Research program, NTUA)

**2005 - 2007: TECHNOLOGICAL EDUCATIONAL INSTITUTE OF KALAMATA,  
DEPARTMENT OF INFORMATICS & TELECOMMUNICATIONS**

Taught the undergraduate course ‘Introduction in Telecommunications’ (1<sup>st</sup> year).

**DECEMBER 1999 – JUNE 2002: PA CONSULTING GROUP, CAMBRIDGE  
TECHNOLOGY CENTRE, WIRELESS TECHNOLOGY PRACTICE, CAMBRIDGE,  
UK**

Leading technical expert for the following R&D projects:

1. *GSM-R network planning for the national railway network (Switzerland – Overall Winner of the 2002 Management Consultancies Association Award)*
2. *Multi-user detection (MUD) for WCDMA (for a leading US manufacturer)*
3. *Design specification of a WCDMA Node B product for pico/micro cells (for a US 3G basestation manufacturer)*
4. *Evaluation of proprietary smart antenna technologies*
  - a. *A new wireless broadband access system (USA)*
  - b. *Cost efficient implementation of a GSM smart antenna base station (USA)*
  - c. *A novel antenna technique and its application to smart antennas (UK)*
  - d. *Design specification for a GSM product with smart antennas (GSM manufacturer)*
5. *Network planning for a national digital audio broadcast network (UK)*
6. *Requirement specification for a new wireless PDA (USA)*
7. *Leaky feeder network upgrade for 2.5 and 3G communications (Hong Kong)*
8. *Network planning and performance evaluation for GSM, CDMA and WCDMA with smart antennas (USA)*
9. *Network planning for WCDMA microcellular systems (Japan)*

**JANUARY 1994 - OCTOBER 1999: UNIVERSITY OF BRISTOL, DEPARTMENT OF  
ELECTRICAL ENGINEERING, CENTRE FOR COMMUNICATIONS RESEARCH**

**Research Assistant, Research Associate, Research Fellow HEFCE (Higher Education Funding Council for England)**

*Role: Proposal writing, key expert, group leader*

1. *ACTS SUNBEAM (Smart UNiversal BEAMforming), funded by the CEC. Partners: ERA Technology (UK), Motorola ECID (UK), Robert Bosch (GER), France Telecom (FR), Thomson CSF Communications (FR), WSI (UK), University of Aalborg (D), University of Catalunya (SP). Duration: 1.5 years.*
2. *Optimisation of Adaptive Antennas for UMTS Microcellular Environments (UK EPSRC Grant, also supported by ORANGE PCS, UK). Duration: 1.5 years.*
3. *WCDMA architectures with adaptive antennas for large cell operational environments (funded by the FUJITSU Europe Telecom R&D Centre, UK): Duration: 3 years.*
4. *Network planning for user location systems(US SME) Duration: 6 months.*

5. *ACTS TSUNAMI IIa - Technology in Smart Antennas for Universal Advanced Mobile Infrastructure (funded by the CEC): Partners: ERA Technology (UK), Orange PCS (UK), Motorola ECID (UK), CASA (SP), France Telecom (FR), Robert Bosch (GER), WSI (UK), University of Aalborg (D), University of Catalunya (SP). Duration 2 years.*
6. *ACTS TSUNAMI IIb (funded by the CEC): Duration: 1 year*
7. *Capacity evaluation of GSM 1800 with adaptive antennas (funded by Orange PCS, UK): Duration: 6 months.*
8. *RACE TSUNAMI I project (funded by the CEC): Partners: ERA Technology (UK), Alcatel SEL (GER), Detycom (SP), Hagenuk (GER), University of Aalborg (D), University of Catalunya (SP). Duration: 2 years.*

**1992 - 1993: POSTGRADUATE RESEARCH ASSISTANT, NATIONAL TECHNICAL UNIVERSITY OF ATHENS, DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING, MOBILE RADIOCOMMUNICATIONS LABORATORY**

1. *INMARSAT 21 R&D project: Pan-European safety standards for non-ionising radiation*
2. *RACE BARBARA project: functional requirements for tele-library/training applications*

**ADDITIONAL INFORMATION**

1. Vice-chair of the expert evaluation panel for Chist-Era research proposals (2016)
2. National representative at the Cost Action CA15104: Inclusive Radio Communication Networks for 5G and beyond - IRACON, (2016)
3. Expert member of the NetWorld 2020.
4. External Expert evaluator for the project 'Study and analysis of medical data with MRI/DTI/fMRI', August-November 2015.
5. Elected a EurAAP (European Association on Antennas and Propagation) regional delegate for Group 15 (Cyprus, Greece, Israel, Turkey), for the period 2015-2017.
6. National representative at the Cost Action IC1102: Versatile, Integrated, and Signal-aware Technologies for Antennas - VISTA, (2011).
7. 'Invited Researcher', R&D Programme ENTER, (2003).
8. Overall Winner with the PA Consulting Group of the 2002 Management Consultancies Association Award, for work with the Swiss Government Federal Office of Transport, developing a wireless communications strategy for the Swiss railway industry (role: main technical expert)
9. IEEE Senior member (2002)
10. Research Fellow at the University of Bristol, UK, funded by HEFCE (Higher Education Funding Council for England), (1998)
11. 'Distinguished Scientist' Award from the Hellenic Ministry of Defence (1997)
12. Postgraduate studentship from the Centre for Communications Research of the University of Bristol, UK (1994-1995)
13. Member of the Editorial Boards of
  - a. Scientific & Academic Publishing Journal of Wireless Networking and Communications (2012)
  - b. Hindawi ISRN Communications Journal (2010)
  - c. Hindawi Journal of Electrical and Computer Engineering (2007)
14. Guest Editor of the IEEE Communications Magazine (two-part) special issue on 'Adaptive Antennas for Wireless Communications' (2004).
15. Associate Technical Editor of the IEEE Communications Magazine (2004)

16. TPC member for more than 25 international IEEE conferences
17. Reviewer for 15 international journals, more than 20 international conferences, several special issue proposals for journals and 2 book proposals (CRC Press, Academic Press)
18. Chairman of the COST 260 working group 2b (smart antennas) and expert member of SIG1, COST231, COST259 and COST260
19. Chairman/organiser:
  - i/ IBC seminar on 3G WCDMA network planning (London 2002)
  - ii/ IIR seminar on smart antennas (London 2001)
  - iii/ First COST260 Workshop on smart antennas (Croatia 1997)
  - iv/ ICC'99 in Canada
20. Acknowledged for contributions in the books:
  - i/ J.D.Parsons "The mobile radio propagation channel"
  - ii/ H.R.Anderson, "Fixed broadband wireless system design"
21. 1427 Citations (*Google Scholar h-index 18*)
22. 2780 publication views, 811 citations and 42.65 impact points at Research Gate
23. Has supervised 10 PhD students, 15 MSc students and more than 40 undergraduate students.
24. The book MIMO System Technology for Wireless Communications, G.V.Tsoulos (ed.), CRC Press, 2006, ISBN-13: 978-0-8493-4190-8 has sold worldwide 705 printed copies and 36 electronic copies.
25. The book Adaptive Antennas for Wireless Communications, G.V.Tsoulos (ed.), Wiley-IEEE Press, 2001, ISBN 0-780-36016-8 has sold worldwide 874 printed copies.

## **PUBLICATIONS**

### **THESES**

- [1] Smart Antennas for Third Generation Wireless Personal Communications, G.V.Tsoulos, PhD Thesis, University of Bristol, Bristol, UK, 1997.
- [2] Application of Adaptive Antenna Technology to Third Generation Mixed Cell Radio Architectures, G.V.Tsoulos, Master to PhD transfer thesis, University of Bristol, Bristol, UK, 1993.
- [3] Theory and Applications of Spread Spectrum Modulation; Modem Implementation with the Direct Sequence Spread Spectrum Technique and Measurements, Undergraduate Thesis, National Technical University of Athens, School of Electrical & Computer Engineering, Athens, 1992.

### **BOOKS**

- [1] MIMO System Technology for Wireless Communications, G.V.Tsoulos (ed.), CRC Press, 2006, ISBN-13: 978-0-8493-4190-8.
- [2] Adaptive Antennas for Wireless Communications, G.V.Tsoulos (ed.), Wiley-IEEE Press, 2001, ISBN 0-780-36016-8.

### **BOOK CHAPTERS**

- [1] G.V.Tsoulos and G.E. Athanasiadou, "RF Planning for next generation systems", Chapter 9 in *New Directions in Wireless Communications systems: From Mobile to 5G*, A.Kanatas, N.Nikita, T.Mathiopoulos (ed.), CRC Press, 2016.
- [2] G.V.Tsoulos and C.Christodoulou, "Arrays and Smart Antennas", Chapter 11 in *Modern Antenna Handbook*, C.Balanis (ed.), Wiley Interscience, 2008, pp. 531-580.
- [3] D.Zarbouti, G.V.Tsoulos, D.Kaklamani, "Theory and practice of MIMO systems for wireless communications", Chapter 1 in *MIMO Systems for Wireless Communications*, G.V.Tsoulos (ed.), CRC Press, 2006, pp. 29-55.
- [4] G.V.Tsoulos, "Adaptive antennas and MIMO systems for mobile communications", Chapter 1 in *Adaptive Antennas*, Sathish Chandran (ed.), Springer Verlag, 2004, pp. 3-26.
- [5] G.V.Tsoulos, J.McGeehan, M.Beach, "Adaptive antennas for personal communication systems", Chapter 31 in *Insights into Mobile Multimedia Communications*, editors D.Bull, N.Canagarajah and A.Nix, Academic Press, 1999, pp. 493-510.

### **EDITORIALS**

- [1] G.V.Tsoulos, "Adaptive antennas and MIMO systems for wireless communications – Part II", Guest Editor, *IEEE Communications Magazine*, special issue, December 2004.
- [2] G.V.Tsoulos, "Adaptive antennas and MIMO systems for wireless communications – Part I", Guest Editor, *IEEE Communications Magazine*, special issue, October 2004.

### **WHITE PAPERS**

- [1] N. Cardona (editor), 'COST IC1004 white paper on scientific challenges towards 5G mobile communications',  
<http://www.ic1004.org/uploads/Documents/COST%20IC1004%20White%20Paper%20on%20Mobile%20Comms%20Challenges%20towards%205G%20-%202013.pdf>

### **INTERNATIONAL JOURNALS**

- [1] D.Zarbouti, G.Tsoulos, G.Athanasiadou, 'Effects of Antenna Array characteristics on In-Band Full Duplex Relays for Broadband Cellular Communications', Elsevier ICT express

- special issue on next generation (5g/6g) mobile communications, 2 December 2015, ISSN 2405-9595, DOI: 10.1016/j.ict.2015.11.002.
- [2] D.Kontaxis, G.Tsoulos, G.E.Athanasiadou and S.Karampoyas, 'Optimality of Transmit Beamforming in Spatially Correlated MIMO Rician Fading Channels', *Wireless Personal Communications Journal*, Springer, 12 November 2015, pp. 1-14, DOI 10.1007/s11277-015-3125-4.
  - [3] G.V.Tsoulos, G.E.Athanasiadou, 'Analysis of CDMA MIMO Beamforming multicell deployment scenarios using Effective Radiation Patterns', *Wireless Personal Communications Journal*, Springer, Vol. 75, issue 4, pp. 2269-2280, April 2014.
  - [4] D.Zarbouti, G.V.Tsoulos, G.E.Athanasiadou, C.A.Valagiannopoulos, 'The Effective Radiation Pattern concept for realistic performance estimation of LTE wireless systems', *International Journal of Antennas and Propagation*, Hindawi, September 2013.
  - [5] D.Kontaxis, G.Tsoulos and S.Karampoyas, 'Ergodic Capacity Optimization for Single-Stream Beamforming Transmission in MISO Rician fading Channels', *IEEE Transactions on Vehicular Technology*, vol. 62, no. 2, November 2012, pp. 628-641.
  - [6] D.Kontaxis, G.Tsoulos and S.Karampoyas, 'Beamforming Capacity Optimization for Rician MIMO Wireless Channels', *IEEE Wireless Communications Letters*, vol. 1, no. 3, June 2012, pp. 257-260.
  - [7] M.Batistatos, G.Tsoulos and G.Athanasiadou, 'Mobile Telemedicine for Moving Vehicle Scenarios: Wireless Technology Options and Challenges', *Elsevier Journal of Network and Computer Applications*, vol. 35, issue 3, pp. 1140-1150, 2012.
  - [8] I.Stiakogiannakis, G.Athanasiadou, G.Tsoulos, D.Kaklamani, 'Performance analysis of fractional frequency reuse for multicell WiMax networks based on site-specific propagation modelling', *IEEE Antennas and Propagation Magazine*, Vol. 54, No. 1, February 2012.
  - [9] D.Zarbouti, D.Tsilimantos, G.V.Tsoulos, G.Athanasiadou, and D.Kaklamani, "Performance of OFDMA multicell systems with Opportunistic Beamforming", *Wireless Personal Communications*, Springer, April 2011, doi: 10.1007/s11277-011-0315-6.
  - [10] D.Tsilimantos, D.Zarbouti, G.V.Tsoulos, G.Athanasiadou, and D.Kaklamani, "Fairness and throughput trade-off analysis for UMTS WCDMA network planning", *Wireless Personal Communications*, Springer, vol. 56, issue 4, pp. 693-714, Jan. 2011.
  - [11] P.Gkonis, G.V.Tsoulos, D.Kaklamani, 'Performance Evaluation of MIMO-WCDMA Cellular Networks in Multiuser Frequency Selective Fading Environments' *Wireless Communications and Mobile Computing Journal*, Wiley, Jan. 2011, DOI: 10.1002/wcm.1096.
  - [12] T.Athanaileas, G.Athanasiadou, G.V.Tsoulos, D.Kaklamani, 'Parallel Radio-Wave Propagation Modelling with Image-Based Ray Tracing Techniques', *Elsevier Parallel Computing Journal*, vol. 36, pp. 679-695, 2010.
  - [13] P.K.Gkonis, T.E.Athanaileas, G.V.Tsoulos, G.E.Athanasiadou, and D.I.Kaklamani, "Adaptive Beam-Centric Admission Control for WCDMA Multicell/Multiservice Scenarios with Non-Uniform Traffic", *Springer Wireless Personal Communications Journal*, December 2009.
  - [14] P.K.Gkonis, G.V.Tsoulos and D.Kaklamani, "Dual Code Tx Diversity with Antenna Selection for Spatial Multiplexing in MIMO-WCDMA Networks," *IEEE Communication Letters*, vol. 13, No. 8, pp. 570-573, August 2009.
  - [15] D.Zarbouti, I.Stiakogiannakis, G.V.Tsoulos, G.Athanasiadou, D.Kaklamani, 'OFDMA techniques in multicellular networks with total frequency reuse', *Elsevier Computer Communications*, Volume 32, Issue 3, February 2009, Pages 522-530.
  - [16] T.Athanaileas, P.Gkonis, G.Athanasiadou, G.V.Tsoulos and D.Kaklamani, 'Implementation and evaluation of a web-based grid-enabled environment for WCDMA

- multibeam system simulations', IEEE Antennas and Propagation Magazine, Vol. 50, No. 3, June 2008, pp. 195-204.
- [17] P.Gkonis, G.V.Tsoulos, G.Athanasiadou and D.Kaklamani, 'An Adaptive Beam-Shaping Strategy for WCDMA Multicellular Networks with Non-Uniform Traffic Requirements', Academy Publisher, Journal of Communications, vol. 3, no. 4, September 2008, pp. 16-25.
- [18] D. Zarbouti, G. Tsoulos and D. Kaklamani, "Impact of Fading Correlation and Calibration Distortion on MIMO Capacity Performance", WSEAS Transactions on Communications, vol.4, pp. 1040-1047, October 2005.
- [19] G.V.Tsoulos and G.E.Athanasiadou, 'On the application of adaptive antennas to microcellular environments: Radio channel characteristics and system performance', IEEE Transactions on Vehicular Technology, January 2002, vol. 51, no 1, pp. 1-16.
- [20] S.Loyka and G.V.Tsoulos, 'Estimating MIMO system performance using the correlation matrix approach', IEEE Communications Letters, January 2002, vol. 6, no 1, pp. 19-21.
- [21] R.J.Piechocki, J.P.McGeehan and G.V.Tsoulos, "A new Stochastic Spatio-Temporal Propagation Model (SSTPM) for mobile communications with antenna arrays", IEEE Transactions on Communications, vol. 49, no 5, May 2001, pp. 855-862.
- [22] M.A.Beach, J.P.McGeehan, C.M.Simmonds, P.Howard, P.Darwood, G.V.Tsoulos, A.R.Nix, P.Hafezi & Y.Sun, "European Smart Antennas Testbeds", Journal on Communications Networks, vol 2, no 4, December 2000, pp. 317-324.
- [23] G.V.Tsoulos, G.E.Athanasiadou and R.J.Piechocki, "Low complexity smart antenna methods for third generation WCDMA systems", IEEE Transactions on Vehicular Technology, November 2000, vol. 49, no 6, pp. 2382-2396.
- [24] G.V.Tsoulos, "Experimental and theoretical capacity analysis of space division multiple access (SDMA) with adaptive antennas", IEE Proceedings on Communications, vol. 146, No 5, October 1999, pp. 307-311.
- [25] G.V.Tsoulos, "Smart antennas for mobile communication systems: Benefits and challenges", IEE Electronics and Communication Engineering Journal, vol. 11, No 2, April 1999, pp. 84-94.
- [26] G.V.Tsoulos, "Single and multiple cell deployment of adaptive antennas with CDMA", IEE Electronics Letters, 12th November 1998, Vol. 34, No. 23, pp. 2196-2197.
- [27] G.V.Tsoulos, "Approximate SIR and BER formulas for DS-CDMA based on the produced radiation pattern characteristics with adaptive antennas", IEE Electronics Letters, 17th September 1998, Vol. 34, No 19, 1802-1804.
- [28] R.J.Piechocki, G.V.Tsoulos and J.P.McGeehan, "Simple general formula for the PDF of the Angle of Arrival in large cell operational environments", IEE Electronics Letters, 3<sup>rd</sup> September 1998, Vol. 34, No 18, pp. 17484-1785.
- [29] G.V.Tsoulos, G.E.Athanasiadou, M.A.Beach and S.C.Swales, "Adaptive Antennas for Microcellular and Mixed Cell Environments with DS-CDMA", Kluwer Academic Publishers, Wireless Personal Communications Journal, special issue on *CDMA for Universal Personal Communications Systems*, vol. 7, No. 2/3, pp. 147-169, August 1998.
- [30] G.V.Tsoulos, J.P.McGeehan and M.A.Beach, "Space Division Multiple Access (SDMA) Field Trials - Part I: Tracking and BER Performance", IEE Proceedings on Radar, Sonar and Navigation, special issue on Antenna Array Processing Techniques, pp. 73-78, February 1998.
- [31] G.V.Tsoulos, J.P.McGeehan and M.A.Beach, "Space Division Multiple Access (SDMA) Field Trials - Part II: Calibration and Linearity issues", IEE Proceedings on Radar, Sonar and Navigation, special issue on Antenna Array Processing Techniques, pp. 79-84, February 1998.

- [32] G.V.Tsoulos, M.A.Beach and J.P.McGeehan “Wireless personal communications for the 21st century: European technological advances in adaptive antennas”, IEEE Communications Magazine, September 1997, pp. 102-109.
- [33] G.V.Tsoulos, M.A.Beach, “Sensitivity Study for the Capacity Enhancement of DCS1800 with Adaptive Multibeam Antennas”, IEE Electronics Letters, 12th September 1996, Vol. 32, No 19, 1745-1746. [C14]
- [34] G.V.Tsoulos, M.A.Beach and S.C.Swales, “DS-CDMA capacity enhancement with Adaptive Antennas”, IEE Electronics Letters, 3rd August 1995, vol.31, No 16, pp.1319-1320.

### **INTERNATIONAL CONFERENCES (FULL PAPER REVIEW)**

- [1] I.K. Valavanis, D. Zarbouti, G.E. Athanasiadou, G.V. Tsoulos, ' Basestation Antenna Pattern Reconfiguration for Minimum Transmit Power Network Planning', IEEE online conference on Green Communications, 10-12 November 2015.
- [2] G.Athanasiadou, G.Tsoulos, D.Zarbouti, 'Base station positioning for heterogeneous systems with coverage, capacity and cost criteria', European Conference on Networks and Communications, Paris, France, 29 June - 2 July 2015.
- [3] D.Zarbouti, G.Tsoulos, G.Athanasiadou, '4G Multicell Systems with In-Band Full Duplex Relays: Using Beamforming to Lower Self-Interference and/or Transmitted Powers', IEEE VTC Spring, Glasgow, Scotland, 11-14 May 2015.
- [4] D.Zarbouti, G.Tsoulos, G.Athanasiadou, 'The effects of antenna array size and back lobe level on self-interference and transmitted powers of 4g beamforming multicell systems with in-band full duplex relays', 9th EUCAP, Lisbon, Portugal, 12-17 April 2015 (**Finalist for Best Paper Award**).
- [5] G.Athanasiadou, G.Tsoulos, D.Zarbouti, ' A combinatorial algorithm for Base station location optimization for LTE mixed cell MIMO', 9th EUCAP, Lisbon, Portugal, 12-17 April 2015.
- [6] G.E. Athanasiadou, D. Zarbouti and G.V. Tsoulos, "Automatic Location of Base-Stations for Optimum Coverage and Capacity Planning of LTE Systems", 8th European Conference on Antennas and Propagation (*EuCAP 2014*), Hague, The Netherlands, 6-11 Apr. 2014.
- [7] D. Zarbouti, G. Tsoulos and G.Athanasiadou, “Theoretic SIR for Multicarrier MISO Beamforming cellular systems,” *EuCAP 2013*, Gothenburg, Sweden, 8-12 April 2013.
- [8] D.Kontaxis, G.Tsoulos and S.Karampoyas, ‘Optimum Ergodic Beamforming Capacity in Urban Microcellular Operational Environments’, IWCMC2012, Cyprus.
- [9] D.Kontaxis, G.Tsoulos and S.Karampoyas, ‘Optimum Beamforming for Correlated Rician MISO channels’, IEEE VTC 2011 Spring, Budapest, Hungary, 15-18 May 2011.
- [10] D.A. Zarbouti, D.C. Tsilimantos, G.V. Tsoulos, G.E. Athanasiadou, D.I. Kaklamani, "OFDMA multicell systems with opportunistic beamforming," Personal Indoor and Mobile Radio Communications (PIMRC), 2010 IEEE 21st International Symposium on, Istanbul, Turkey, pp.1407-1412, 26-30 Sept. 2010.
- [11] D.Zarbouti, I. Stiakogiannakis, G. Tsoulos, G. Athanasiadou and D. Kaklamani, “Performance Evaluation of OFDMA Techniques in Multicellular Networks”, *19<sup>th</sup> IEEE PIMRC*, Nice, France, 15-18 September 2008.
- [12] T. Athanaileas, N. Tselikas, G. Tsoulos and D. Kaklamani, “An Agent-based Framework for Integrating Mobility into Grid Services”, *1<sup>st</sup> ACM International Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications (ACM MobilWare 2008)*, Innsbruck, Austria, February 12-15, 2008.
- [13] D.Kontaxis, G.Tsoulos, S.Karabogias, ‘Performance of multiple antenna systems in different operational environments’, *18<sup>th</sup> IEEE PIMRC*, Athens, Greece, 3-7 September, 2007.

- [14] G.Athanasiadou and G.Tsoulos, "Incorporating the Fresnel Zone Theory in Ray Tracing for Space-Time Modelling of Fixed Wireless Access Channels", *2<sup>nd</sup> European Conference on Antennas and Propagation (EuCAP 2007)*, Edinburgh, UK, 11-16 November 2007.
- [15] D. Zarbouti, G. Tsoulos and D. I. Kaklamani, "Performance Evaluation of OFDMA RRM Algorithms with Total Spectrum Reuse," *EuCAP 2007*, Edinburgh, UK, 11-16 November 2007.
- [16] D. Tsilimantos, G. Tsoulos and D. I. Kaklamani, "UMTS WCDMA Radio Network Planning using Beamforming Techniques", *EuCAP 2007*, Edinburgh, UK, 11-16 November 2007.
- [17] P. Gkonis, G. Tsoulos and D. I. Kaklamani, "Performance of WCDMA Networks with Space-Time Block Coding and Multiuser Detection", *EuCAP 2007*, Edinburgh, UK, 11-16 November 2007.
- [18] P. Gkonis, G.Tsoulos and D. Kaklamani, "Performance Evaluation of A Beam-Centric Adaptive Admission Control for WCDMA Cellular Networks with Smart Antennas", *16<sup>th</sup> IST Mobile & Wireless Communications Summit*, Budapest, Hungary, 1-5 July 2007.
- [19] P. Gkonis, G. Tsoulos and D. Kaklamani, "An Adaptive Admission Control Strategy for WCDMA Multicellular Networks with Non-Uniform Traffic", *66<sup>th</sup> IEEE Vehicular Technical Conference (VTC 2007)*, Baltimore, USA, 1-3 October 2007, pp. 989-993.
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