

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s)	Alberto Ginesi
Address(es)	Johannes Verhulststraat 173-2, 1075GX Amsterdam (NL)
Nationality	Italian & Canadian
Date of birth	14-11-1967
Phone Contact	0031648561280
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Work experience

Dates	December 2021 – present
Occupation or position held	Contract Professor – University of Bologna Italy
Main activities and responsibilities	Holding a 12 hours lecture as a complement of the Master student course on Satellite Communications
Dates	May 2022 - present
Occupation or position held	Contract Professor – SnT - Interdisciplinary Centre for Security, Reliability and Trust
Main activities and responsibilities	Holding a 22 hours lecture on System Design of LEO/GEO High Throughput Satellites to PhD students, local research staff and industry professionals
Dates	June 2006 – present

Occupation or position held **Head of the Telecommunications Systems and Techniques Section**, Electrical Engineering Department, Technical and Quality Management Directorate, European Space Agency

Main activities and responsibilities Technical architect responsible for the definition of

- satellite communication systems and subsystems for advanced satellite networks;
- advanced modulation, coding, multiple access, synchronization and signal processing;
- modems for ground and space applications;
- advanced digital signal processing techniques;
- networking, traffic engineering, resource management, protocols design and verification;
- techniques for securing communication links from an end-to-end perspective;
- payload communications/control links, equipment and techniques;
- end-to-end communication (sub)-system performance (simulation and measurement) analysis.

In addition, the position includes the following duties:

- internal and external research activities, including industrial contracts preparation and management;
- support to ESA's R&D programs preparation in the section field of competence;
- Telecommunication systems analyses in order to support technological activities of other sections/divisions of the department;
- support and consultation to ESA projects and programmes, national agencies, industry and other international institutions;
- management/supervision of a group of 15 highly skilled engineers covering the different section technical areas

Dates June 2003 – June 2006

Occupation or position held **Communications System Engineer, Telecommunications & TTC Systems and Techniques Section, Electrical Engineering Department, Technical and Quality Management Directorate, European Space Agency**

Main activities and responsibilities Internal and external research activities, including contracts preparation and management of contracts; support to ESA's R&D programs preparation; support and consultation to ESA projects and programmes, national agencies, industry and other international institutions - in the areas of:

- Satellite communication systems and subsystems definition for broadcast, internet access and professional applications: single/multi-beam transparent and regenerative systems in Ku, Ka and Q/V bands - system dimensioning, payload parametric design, ground segment requirements
- Physical and MAC layer processing: linear and continuous phase modulations, OFDM, interference cancellation techniques, joint synchronization and decoding, advanced forward error correction schemes (turbo codes and LDPC), beam hopping, modem digital front end processing, non-linear pre-distortion techniques
- Modem design and prototyping for ground and space applications: Modem for High Order Modulation Schemes (MHOMS), DVB-S2 and enhanced DVB-RCS modems
- networking, traffic engineering, resource management, protocols design and verification: enhanced resource managements for DVB-S2 and DVB-RCS, encapsulation protocols for IP packets over DVB-S2 generic stream, capacity estimates based on user traffic requirements
- Telemetry, Tracking & Command (TT&C) systems and techniques for spacecraft-to-ground communications: enhanced air interface definition for very high speed (1 Gbps) payload telemetry for near-Earth scientific missions, preliminary investigations on applicability of ACM/VCM techniques to telemetry downlinks
- end-to-end communication (sub)-system performance (simulation and measurement) analysis: DVB-S2 and DVB-RCS end-to-end system simulations

Dates July 2002 – June 2003

Occupation or position held **Senior Communications Systems Engineer, Modis Europe Limited, as a contractor for ESA/ESTEC (Noordwijk, The Netherlands) in the Telecommunications & TTC Systems and Techniques Section, Electrical Engineering Department, Technical and Quality Management Directorate, European Space Agency**

Main activities and responsibilities	<ul style="list-style-type: none"> • Assessment of new concepts and techniques to be applied to next generation satellite communication systems • Analysis, definition, specification and development follow-up of key sub-systems exploiting advanced signal processing for satellite communication systems (DVB-S, DVB-RCS, Low rate interactive terminals). • Support to ESA projects. • Responsible for technical tasks associated with external consultancies • -Participation and contribution to DVB standardization body
Dates	April 2000– July 2002
Occupation or position held	Senior Modem Designer, Catena Networks (Ottawa, Canada):
Main activities and responsibilities	<ul style="list-style-type: none"> • DMT ADSL (Asymmetrical Digital Subscriber Line) modem system design with principal responsibilities on DSP and algorithm definition and simulation and particular emphasis on: equalization, bit allocation, Reed-Solomon FEC code optimization, bit swapping, DMT signal peak-to-average property analysis, modem finite state machine initialization and fast re-train, fixed point analysis. Lab testing/support of designed algorithms. Analysis and simulation of the line-card ATM-based backplane scheduling algorithm. • DMT VDSL (Very-high-bit-rate Digital Subscriber Line) modem system design and complexity analysis with simulation of the key algorithms (radio frequency interference canceler and equalization). Parametric design of the modem digital and analog front end. • SHDSL (Single-pair High-speed Digital Subscriber Line) TC-PAM-based modem system design and complexity analysis with simulation of the key algorithms (DFE equalizer and Tomlinson-Harashima precoder, echo canceler, timing recovery/front end sampling rate adaptation through digital interpolation). Modem clock generation and distribution. Parametric design of the modem digital and analog front end. • Coordination of the DSP/Digital Communication-based research activities. • ITU (International Telecommunication Union) co-editor for the initialization/fast start-up/loop diagnostics procedures of second generation (G.dmt.bis and G.lite.bis) ADSL modems.
Dates	December 1996 – April 2000
Occupation or position held	DSP and Communication System Engineer, Nortel Networks (Ottawa, Canada):
Main activities and responsibilities	<ul style="list-style-type: none"> • Algorithm/system development of a DMT (Discrete Multitone Technique)-based ADSL modem. • Definition of the characteristics of next generation DSL products; • Prepare contributions to be submitted to ITU and ANSI Standard meetings; • Nortel Networks liaison with researchers from the following universities: University of Ottawa (Reed-Solomon code optimization for DMT), Rice University, Houston-TX (Wavelet analysis for DSL application), University of Alberta (Improved Time-Domain Equalization for DMT), University of Maryland (Equalization Techniques for DMT modems), University of Modena and Reggio Emilia (Italy) (Optimum DMT Receiver Architecture and DMT Theoretical Performance Limits);
Dates	May 1996 – December 1996
Occupation or position held	Research Associate, Carleton University (Ottawa, Canada):
Main activities and responsibilities	<ul style="list-style-type: none"> • Design and performance analysis of receivers suitable for LMCS (Local Multipoint Communication System) applications. Study concentrated on channel equalization techniques. Work undertaken in collaboration with Prof. D.D. Falconer and Prof. M. El-Tanany (Carleton University, Ottawa – Canada). • Study of block equalization techniques for packet data transmissions over time-varying and frequency-selective channels. Work undertaken in collaboration with Prof. D.D. Falconer (Carleton University, Ottawa – Canada) and Prof. G.M.Vitetta (University of Modena, Italy)
Dates	1995-1998
Title of qualification awarded	PhD Degree in Telecommunication Engineering

Name and type of organisation providing education and training

University of Pisa (Italy)

Dates

1986-1993

Title of qualification awarded

Dr. Ing. Degree (Laurea) Vote: 110/110 cum laude

Name and type of organisation providing education and training

University of Pisa (Italy), Electronic Engineering

Personal skills and competences

Mother tongue(s)

Italian

Other language(s)

Self-assessment

European level ()*

English

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C2

(*) *Common European Framework of Reference for Languages*

NEXT: LIST OF PATENTS AND PUBLICATIONS

LIST OF PATENTS

SATCOM

- **Joint Transmitter Signal Processing in Multi-Beam Satellite Systems**
Publication Number: WO/2015/192995
Filed: 14.04.2015
Assignee: ESA
Inventors: D-P. Arapoglou, A. Ginesi et al

- **INTERFERENCE-RESILIENT FLEXIBLE TECHNIQUES FOR PAYLOAD RESOURCE ALLOCATION IN BROADBAND SATELLITES**
Publication Number: WO/2017/211430
Filed: 10.06.2016
Assignee: ESA
Inventors: A. Ginesi, E. Re, D-P. Arapoglou,

- **RECEIVING METHOD AND RECEIVER FOR SATELLITE-BASED AUTOMATIC IDENTIFICATION SYSTEMS**
Publication number: 20160380792
Filed: January 22, 2014
Assignee: ESA
Inventors: Giulio Colavolpe, Alessandro Ugolini, Tommaso Foggi, Juan Lizarraga, Alberto Ginesi, Stefano Cioni

- **Automatic identification system receiver and satellite payload comprising the same**
Patent number: 9008233
Filed: October 19, 2010
Assignee: ESA
Inventors: Paolo Burzigotti, Alberto Ginesi

- **Process for providing a pilot aided phase synchronization of carrier**
Patent number: 7409024 + 7397869 (two patents)
Filed: September 1, 2004
Date of Patent: August 5, 2008
Assignee: ESA
Inventors: Alberto Ginesi, Domenico Fittipaldi, Alan Bigi, Riccardo De Gaudenzi

ADSL

- **Optimal bit allocation system for Reed-Solomon coded data**
Patent number: 7673221
Filed: October 26, 2001
Assignee: Ciena Corporation
Inventors: Bin Li, Alberto Ginesi, Song Zhang

- **Apparatus and method of loop and rate dependent power cutback**
Patent number: 7536197
Filed: July 30, 2001
Assignee: Ciena Corporation
Inventors: Alberto Ginesi, Francois Tremblay, Scott McClennon

- **Equalization scheme for DSL receivers in presence of an under-sampled or over-sampled transmit IDFT**
Patent number: 7463678
Filed: March 10, 2003
Date of Patent: December 9, 2008
Assignee: CIENA Corporation
Inventors: Alberto Ginesi, Song Zhang, Andrew Deczky, Duncan Baird, Christian Bourget

- **Method and system for turbo encoding in ADSL**
Patent number: 7173978
Filed: July 23, 2001
Date of Patent: February 6, 2007
Inventors: Song Zhang, Bin Li, Andrew Deczky, Alberto Ginesi

- **System and method for data transmission in DMT-based DSL modems**
Patent number: 7061974
Filed: February 5, 2002
Date of Patent: June 13, 2006
Assignee: Ciena Corporation
Inventors: Alberto Ginesi, Andrew Deczky

- **Method for power reduction in inter-symbol interference limited channels**
Patent number: 7050825
Filed: July 24, 2002
Date of Patent: May 23, 2006
Assignee: Ciena Corporation
Inventors: Alberto Ginesi, Scott McClennon

- **Loop diagnostic mode for ADSL modems**
Patent number: 6981186
Filed: July 30, 2002
Date of Patent: December 27, 2005
Assignee: Ciena Corporation
Inventors: Alberto Ginesi, Scott McClennon

- **Adaptive front end for discrete multitone modem**
Patent number: 6693957
Filed: December 31, 1998
Date of Patent: February 17, 2004
Assignee: Nortel Networks Limited
Inventors: Michael John Wingrove, Alberto Ginesi, Gwendolyn Kate Harris, Robert Scott McClennon

- **Frame alignment and time domain equalization for communications systems using multicarrier modulation**
Patent number: 6456654
Filed: December 22, 1998
Date of Patent: September 24, 2002
Assignee: Nortel Networks Limited
Inventors: Alberto Ginesi, Christian Bourget, Mohammad Pakravan

- **Method and apparatus for time-domain equalization in FDM-based discrete multi-tone modems**

Patent number: 6404806

Filed: December 31, 1998

Date of Patent: June 11, 2002

Assignee: Nortel Networks Limited

Inventors: Alberto Ginesi, Christian Bourget, Michael John Wingrove

- **Scheme for the initialization of ADSL modems**

Publication number: 20020061059

Filed: July 24, 2001

Publication date: May 23, 2002

Inventor: Alberto Ginesi

LIST OF PUBLICATIONS

SATCOM SYSTEMS

- Karin Plimon, Johannes Ebert, Harald Schlemmer, Alberto Mengali, Alberto Ginesi “*Subset Precoding and Tapering on Phased Arrays for High Throughput Satellite Systems*”, CSNDSP2022
- Karin Plimon, Johannes Ebert, Harald Schlemmer, Alberto Mengali, Alberto Ginesi, “*Low Complexity Subset Precoding for High Throughput Satellite Systems*”, CSNDSP2022
- N. Mazzali and A. Ginesi, “*Semianalytical Estimation of Nonlinear Distortion in Active Antennas*,” 2020 10th Advanced Satellite Multimedia Systems Conference and the 16th Signal Processing for Space Communications Workshop (ASMS/SPSC), 2020, pp. 1-7, doi: 10.1109/ASMS/SPSC48805.2020.9268834.
- P. -D. Arapoglou, S. Cioni, E. Re and A. Ginesi, “*Direct Access to 5G New Radio User Equipment from NGSO Satellites in Millimeter Waves*,” 2020 10th Advanced Satellite Multimedia Systems Conference and the 16th Signal Processing for Space Communications Workshop (ASMS/SPSC), 2020, pp. 1-8, doi: 10.1109/ASMS/SPSC48805.2020.9268928.
- A. Mengali, A. Ginesi and S. D'Addio, “*Computer-Aided Payload Architecture Optimization for HTS Satellites*,” 2020 10th Advanced Satellite Multimedia Systems Conference and the 16th Signal Processing for Space Communications Workshop (ASMS/SPSC), 2020, pp. 1-8, doi: 10.1109/ASMS/SPSC48805.2020.9268888.
- T. de Cola, A. Ginesi, G. Giambene, G. C. Polyzos, V. A. Siris, N. Fotiou, Y. Thomas, “*Network and Protocol Architectures for Future Satellite Systems*”, Book, 2017
- Pantelis-Daniel Arapoglou, M. Bertinelli, P. Concarì, A. Ginesi, M. Lanucara, “*Benchmarking the future of RF in space missions: From low earth orbit to deep space*”, 2017 IEEE MTT-S International Microwave Symposium (IMS)
- A. Ginesi, E. Re and P-D. Arapoglou “*Joint Beam Hopping and Precoding in HTS Systems*”, Submitted to 9th EAI International Conference on Wireless and Satellite Systems (formerly PSATS), 2017
- M. Á. Vázquez, A. I. Pérez-Neira, D. Christopoulos, S. Chatzinotas, B. Ottersten, A. Ginesi, D. Arapoglou, G. Taricco, “*Precoding in Multibeam Satellite Communications: Present and Future Challenges*”, IEEE Wireless Communications, Vol. 23, No. 6, pp. 88 – 95, December 2016
- D. Christopoulos, S. Chatzinotas, G. Taricco and A. Ginesi, “*Multibeam joint precoding*”, In book: Cooperative and Cognitive Satellite Systems, pp.83-118
- M. A. Vazquez; A. Perez-Neira; D. Christopoulos; S. Chatzinotas; B. Ottersten; P-D. Arapoglou; A. Ginesi; G. Taricco, “*Precoding in Multibeam Satellite Communications: Present and Future Challenges*”, IEEE Wireless Communications, Year: 2016, Volume: 23, Issue: 6
- M. Angelone, N. Alagha, D. Arapoglou, A. Ginesi, “*DVB-S2X system performance results for broadcast and unicast broadband networks*”, International Journal of Satellite Communications and Networking, January 2016
- P-A. Arapoglou, A. Ginesi, S. Cioni, S. Erl, F. Clazzer, S. Andrenacci, A. Vanelli-Coralli, “*DVB-S2x Enabled Precoding for High Throughput Satellite Systems*”, International Journal of Satellite Communications and Networking 34(3) · April 2015
- C. Morel, D. Arapoglou, M. Angelone and A. Ginesi, “*Link Adaptation Strategies for Next Generation Satellite Video Broadcasting: A System Approach*”, IEEE Transactions on Broadcasting 61(4):1-1 · September 2015
- A. Ginesi, S. Cioni, M. Angelone, “*DVB-S2X channel models: Rationale and justifications*”, 2014 7th Advanced Satellite Multimedia Systems Conference and the 13th Signal Processing for Space Communications Workshop (ASMS/SPSC)
- M. Bertinelli, P-D. Arapoglou, A. Ginesi, “*Performance Evolution of Payload Data Telemetry for Earth Observation LEO Satellites*”, 31st AIAA International Communications Satellite Systems Conference, October 2013
- H. Skinnemoen, C. Rigal, A. Yun, L. Erup, N. Alagha and A. Ginesi, “*DVB-RCS2 overview*”, International Journal of Satellite Communications and Networking 31(5) · June 2013

- M. Angelone and A. Ginesi, “*Performance of an alternative SSPA-based payload for next generation broadband multi-spot beam systems*”, 31st AIAA International Communications Satellite Systems Conference, 2013
- S. Cioni, B.F. Beidas, U. De Bie, A. Ginesi, R. Iyer-Seshadri, P. Kim, D. Oh, A. Noerpel, M. Papaleo, A. Vanelli-Coralli, L.N. Lee, “*Continuous Phase Modulation for Broadband Satellite Communications: design and trade-offs*”, International Journal of Satellite Communications and Networking 31(5) · March 2013
- S. Cioni, C. Ernst, A. Ginesi and G. Colavolpe, “*Bandwidth Optimization for Satellite Digital Broadcasting*”, Proceedings of the 31st AIAA International Communications Satellite Systems Conference (ICSSC), At Florence (Italy), October 2013
- M. Angelone; A. Ginesi; E. Re; S. Cioni, “*Performance of a combined dynamic rate adaptation and adaptive coding modulation technique for a DVB-RCS2 system*”, 2012 6th Advanced Satellite Multimedia Systems Conference (ASMS) and 12th Signal Processing for Space Communications Workshop (SPSC)
- E. Re; V. Boissinot; A. Ginesi; C. Tobehn, “*A simple high precision method for extrapolating Sat-AIS system performance*”, 2012 6th Advanced Satellite Multimedia Systems Conference (ASMS) and 12th Signal Processing for Space Communications Workshop (SPSC)
- D. Mignolo, E. Re, A. Ginesi, A.Bolea Alamanac, P. Angeletti, M. Harverson, “*Approaching Terabit/s satellite capacity: A system analysis*”, Proc. Ka Broadband Conf, January 2011
- F. te Hennepe; R. Rinaldo; A. Ginesi; C. Tobehn; M. Wieser; Ø. Olsen; Ø. Hellenen; R. Challamel; F. Storesund, “*Space-based detection of AIS signals: Results of a feasibility study into an operational space-based AIS system*”, 2010 5th Advanced Satellite Multimedia Systems Conference and the 11th Signal Processing for Space Communications Workshop
- M. Aloisio, P. Angeletti, F. Coromina, F. Deborgies, R. De Gaudenzi and A. Ginesi, “*R&D challenges for broadband SATCOM in 2020*”, 2010 IEEE International Vacuum Electronics Conference (IVEC), 2010
- P. Angeletti, F. Coromina, F. Deborgies, R. De Gaudenzi, A. Ginesi, A. Vernucci, “*SATCOMS 2020 R&D challenges: Part I: broadband fixed communications*”, 27th IET and AIAA International Communications Satellite Systems Conference (ICSSC 2009)
- P. Angeletti, A. Bolea Alamanac, F. Coromina, F. Deborgies, R. De Gaudenzi, A. Ginesi, “*SATCOMS 2020 R&D challenges: Part II: mobile communications*”, 27th IET and AIAA International Communications Satellite Systems Conference (ICSSC 2009)
- M.A. Cervera and A. Ginesi, “*On the Performance Analysis of a Satellite-based AIS System*”, SPSC 08 conference, October 2008
- A. Ginesi, R. Rinaldo, R. De Gaudenzi, O. Del Rio Herrero “*Efficiency Improvement Techniques for DVB-Based Interactive Satellite Networks*”, 25th AIAA International Communications Satellite Systems Conference 2007
- K. P. Liolis; A. Bolea-Alamanac; C. Morlet; A. Ginesi, “*Applicability of Fade Mitigation Techniques to Mobile DVB-S2/RCS Satellite Systems: Accent on Railway Scenario*”, 2007 International Workshop on Satellite and Space Communications
- G. Gallinaro, D. Lo Forti, A. Ginesi and C. Morlet, “*Proactive Retransmission Scheme for Mobile DVB-RCS*”, Ka band and Broadband Communications Conference, September 2007
- A. Ginesi and F. Potevin, “*OFDM Digital Transmission Techniques for Broadband Satellites*”, 24th AIAA International Communications Satellite Systems Conference, 2006
- C. Morlet; A. Ginesi, “*Introduction of Mobility Aspects for DVB-S2/RCS Broadband Systems*”, 2006 International Workshop on Satellite and Space Communications
- G. Gallinaro, A. Vernucci and A. Ginesi, “*Performance Analysis and Trade-off of Forward Link Adaptive Coding and Modulation in DVB-S2/DVB-RCS Multi-Beam Satellite Systems*”, ICSSC 2005, Rome, Italy, September 25-28, 2005
- E. Alberty, S. Defever, R. De Gaudenzi, G. Gallinaro, A. Ginesi, C. Moreau, R. Rinaldo and A. Vernucci, “*Adaptive Coding and Modulation for the DVB-S2 Standard Interactive Applications: Capacity Assessment and Key System Issues*”, IEEE Wireless Communications Magazine, August 2007
- M. Aloisio, E. Casini and A. Ginesi, “*Evolution of Space Travelling-Wave Tube Amplifier Requirements and Specifications for Modern Communication Satellites*”, IEEE Transaction on Electron Device, 2006

- M. Aloisio, E. Casini, A. Ginesi and P. Waller, “*Evolution of Space TWT Requirements and Specifications for Modern Communication Satellites*”, 2006 IEEE International Vacuum Electronics Conference held Jointly with 2006 IEEE International Vacuum Electron Sources

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- K. Plimon et al., "*Multi-User Detection Performance Demonstrator for Realistic High Throughput Satellite Systems*," 2018 11th International Symposium on Communication Systems, Networks & Digital Signal Processing (CSNDSP), 2018, pp. 1-6, doi: 10.1109/CSNDSP.2018.8471856.
- K. Plimon, J. Ebert, K. Plimon, W. Gappmair, M. Angelone and A. Ginesi, "*Interference-Dependent Performance of Multi-User Detection in High Throughput Satellite Systems*," 2018 11th International Symposium on Communication Systems, Networks & Digital Signal Processing (CSNDSP), 2018, pp. 1-6, doi: 10.1109/CSNDSP.2018.8471790.
- A. Ugolini, G. Colavolpe, M. Angelone, A. Vanelli-Coralli and A. Ginesi, "*Capacity of Interference Exploitation Schemes in Multibeam Satellite Systems*," in IEEE Transactions on Aerospace and Electronic Systems, vol. 55, no. 6, pp. 3230-3245, Dec. 2019, doi: 10.1109/TAES.2019.2902450
- G. Taricco and A. Ginesi, "*Precoding for Flexible High Throughput Satellites: Hot-Spot Scenario*," in IEEE Transactions on Broadcasting, vol. 65, no. 1, pp. 65-72, March 2019, doi: 10.1109/TBC.2018.2847438.
- V. Icolari, S. Cioni, P. Arapoglou, A. Ginesi and A. Vanelli-Coralli, "*Flexible precoding for mobile satellite system hot spots*," 2017 IEEE International Conference on Communications (ICC), 2017, pp. 1-6, doi: 10.1109/ICC.2017.7996648.
- W. Gappmair and A. Ginesi, "*Cramer-Rao lower bound and parameter estimation for multibeam satellite links*", International Journal of Satellite Communications and Networking, Jul 2016
- W. Gappmair; H. Schlemmer; A. Ginesi, "*Joint synchronization of symbol timing and carrier frequency using the extended zero-crossing property*", 2016 8th Advanced Satellite Multimedia Systems Conference and the 14th Signal Processing for Space Communications Workshop (ASMS/SPSC)
- B. Suesser-Rechberger; W. Gappmair; A. Ginesi, "*Performance of Walsh-Hadamard codes used for timing recovery in a DVB-S2x multibeam scenario*", 2016 10th International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP)
- S. Cioni and A. Ginesi, "*DVB-S2X physical layer performance results over realistic channel models*", Jul 2015 · International Journal of Satellite Communications and Networking
- S. Andrenacci; S. Chatzinotas; A. Vanelli-Coralli; S. Cioni; A. Ginesi; B. Ottersten, "*Exploiting orthogonality in DVB-S2X through timing pre-compensation*", 2016 8th Advanced Satellite Multimedia Systems Conference and the 14th Signal Processing for Space Communications Workshop (ASMS/SPSC)
- M. Caus; Ana I. Perez-Neira; M. Angelone; A. Ginesi, "*An innovative interference mitigation approach for high throughput satellite systems*", 2015 IEEE 16th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)
- S. Andrenacci; M. Angelone; E. A. Candreva; G. Colavolpe; A. Ginesi; F. Lombardo; A. Modenini; C. Morel; A. Piemontese; A. Vanelli-Coralli, "*Physical Layer Performance of Multi-User Detection in Broadband Multi-Beam Systems based on DVB-S2*", European Wireless 2014; 20th European Wireless Conference
- G. Colavolpe; T. Foggi; A. Ugolini; J. Lizarraga; S. Cioni; A. Ginesi, "*A highly efficient receiver for satellite-based Automatic Identification System signal detection*", 2014 7th Advanced Satellite Multimedia Systems Conference and the 13th Signal Processing for Space Communications Workshop (ASMS/SPSC)
- M. Angelone, N. Alagha and A. Ginesi, "*Advanced physical layer techniques: Performance limits within future multi-spot Ka-band networks*", Satellite Telecommunications (ESTEL), 2012 IEEE First AESS European Conference on
- Nader Alagha, Riccardo De Gaudenzi, and Alberto Ginesi. "*Physical Layer Enhancements Beyond DVB-S2*", 29th AIAA International Communications Satellite Systems Conference (ICSSC-2011), International Communications Satellite Systems Conferences (ICSSC)

- S. Rosati; S. Cioni; A. Vanelli-Coralli; G. E. Corazza; G. Gallinaro; A. Ginesi, “A Joint Multi-User Synchronization Method for SC-FMDA in Broadband Satellite Return Channel”, 2010 IEEE Global Telecommunications Conference GLOBECOM 2010
- S. Rosati, S. Cioni, A. Vanelli-Coralli, A. Ginesi, “A Joint Multi-User Synchronization Method for SC-FMDA in Broadband Satellite Return Channel”, Global Telecommunications Conference (GLOBECOM 2010)
- P. Burzigotti; A. Ginesi; G. Colavolpe, “Advanced receiver design for satellite-based AIS signal detection”, 2010 5th Advanced Satellite Multimedia Systems
- G. Bogo, G. Chiassarini, G. D’Angelo, L. Duquerroy, A. Ginesi, A. Poletti, F. Richichi, P. Tabacco, A. Vernucci, “DEDICATION: a test bed for high-rate and high-performance devices for DVB-S2 and GSE; implementation and test results”, 27th IET and AIAA International Communications Satellite Systems Conference (ICSSC 2009)
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- A. Ginesi; R. Rinaldo; R. De Gaudenzi; O. Del Rio, “Advanced Physical and MAC Layer Techniques for DVB-based Interactive Satellite Terminals”, The Institution of Engineering and Technology Seminar on Digital Video Broadcasting Over Satellite: Present and Future, 2006
- R. De Gaudenzi, A. Ginesi, D. Giancristofaro, S. Benedetto, G. Montorsi, M. Luise, L. Giugno, C. Berrou, C. Douillard and G. Gallinaro, “Modem for High Order Modulation Schemes (MHOMS)”, ICSSC 2005, Rome, Italy, September 25-28, 2005
- T. Bottichio, P. Burzigotti, F. Richichi, A. Vernucci and A. Ginesi, “A DVB-S2 Modem Prototype Supporting Interactive Applications with Adaptive Coding and Modulation”, 11th Ka and Broadband Communications Conference, Rome, Italy, September 25-28, 2005
- E. Pascale, A. Barbieri and A. Ginesi, “Advanced Coding and Decoding Techniques with Continuous Phase Modulations for Satellite Communications”, 11th Ka and Broadband Communications Conference, Rome, Italy, September 25-28, 2005
- D. Giancristofaro, M. Fonte, A. Bernardi, A. Ginesi, S. Benedetto, G. Montorsi, M. Luise and M. Straniero, “1Gbps Near-Shannon SCCC-based Modem Prototype”, ICSSC 2005, Rome, Italy, September 25-28, 2005
- E. Casini, R. De Gaudenzi and A. Ginesi, “A Semi-analytical Method to Assess Satellite Non-linear Channel Performance”, ICSSC 2005, Rome, Italy, September 25-28, 2005
- S. Benedetto, R. Garelo, G. Montorsi, C. Berrou, C. Douillard, D. Giancristofaro, A. Ginesi, M. Luise and L. Giugno, “MHOMS: High-Speed ACM Modem for Satellite Applications”, IEEE Wireless Communications Magazine, pp.66-77, Vol. 12, No.2, April 2005
- S. Benedetto, G. Montorsi A. Ginesi, D. Giancristofaro and M. Fonte, “A Flexible Near-Shannon SCCC Turbo Code for Telemetry Applications”, ESA STR-250, November 2005
- A. Ginesi, D. Fittipaldi and A. Bigi, “Pilot-Aided Carrier Recovery Algorithms for Next Generation Broadband Satellite Systems”, 10th Ka and Broadband Communications Conference, Vicenza, Italy, Sept.30-Oct. 2, 2004
- E. Casini, R. De Gaudenzi and A. Ginesi, “DVB-S2 Modem Algorithms Design and Performance Over Typical Satellite Channels”, Int. J. Satel. Commun. Network, 2004; 22:281-318
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