

CURRICULUM VITAE ET STUDIORUM

CONTACT INFORMATION

Prof. Maria Greco

Dipartimento di Ingegneria dell'Informazione (DII)
University of Pisa
via G. Caruso, 16
56122 PISA, Italy
Tel.: +39-050-2217-620
Fax: +39-050-2217-522
E-mail: m.greco@iet.unipi.it or m.greco@ieee.org



DEGREES

- June 1998 Ph.D. in Telecommunication Engineering, University of Pisa.
Thesis title: "Ground and sea non-Gaussian clutter: statistical analysis and adaptive radar detection".
Advisors: Prof. Lucio Verrazzani and Prof. Giovanni Corsini
- Oct. 1994-Oct. 1997: Ph.D. student in Telecommunication Engineering at the DII, University of Pisa.
- April 1993 Laurea degree in Electrical Engineering, University of Pisa.
Thesis title: "Rivelazione di bersagli in clutter di Weibull con una rete di sensori CFAR a decisione decentrata" (Decentralized detection of radar targets embedded in Weibull clutter with a CFAR sensor network).
Advisor: Prof. Lucio Verrazzani

CAREER

- Dec. 2016-Present Full Professor, DII, University of Pisa, Pisa, Italy.
- May-June 2015 Invited Professor, Université Paris-Sud, CentraleSupélec, Paris Saclay, Paris, France.
- Dec. 2011 - Dec. 2016 Associate Professor, DII, University of Pisa, Pisa, Italy.
- April 2001 - Dec. 2011 Assistant Professor, DII, University of Pisa, Pisa, Italy.
- June 1998 - March 2001 Research Assistant, DII, University of Pisa, Pisa, Italy.
- Dec. 1997 - May 1998 Visiting Scholar, Georgia Tech Institute of Research, Gatech, Atlanta, GA, USA.

TEACHING

<u>1999 – 2000</u>	Electrical Communications (2 nd year for undergraduate students in the “Diploma di Laurea” in Telecommunication Engineering), University of Pisa, Italy.
<u>2000 - 2011</u>	Detection and Estimation Theory (1 st year for graduate students in Telecommunication Engineering), University of Pisa, Italy, 6 ECTS.
<u>2001 - 2016</u>	Signal Processing Theory (2 nd year for undergraduate students in Aerospace Engineering), University of Pisa, Italy, 6 ECTS.
<u>2011 – 2013</u>	Signals and Systems (2 nd year for undergraduate students in Telecommunication Engineering), University of Pisa, Italy, 6 ECTS.
<u>2013 - present</u>	Fundamentals of Digital Communication (2 nd year for undergraduate students in Computer Engineering), University of Pisa, Italy, 3 ECTS.
<u>2013 - present</u>	Fundamentals of Radar Theory (2 nd year for graduate students in Telecommunication Engineering), University of Pisa, Italy, 3 ECTS.
<u>2016-present</u>	Signal Processing Theory (2 nd year for undergraduate students in Biomedical Engineering), University of Pisa, Italy, 6 ECTS.

ADVISOR/TUTOR ACTIVITY

Prof. Greco is also thesis advisor of many graduate and undergraduate students and advisor of PhD students.

Post-Docs

Pietro Stinco, currently researcher, CMRE, Centre for Maritime Research and Experimentation, La Spezia, Italy

Stefano Fortunati, currently researcher, University of Pisa, Italy

PhD students

Ruijin Jin, visiting PhD student, September 2016-March 2017, Department of Electronic Engineering, Tsinghua University, Beijing, , P.R. China

Xiong Wei, visiting PhD student, October 2016- September 2017, Nanjing University of Aeronautics and Astronautics, Nanjing, P. R. China

Wang Bing, visiting PhD student, October 2016-September 2017, University of Electronic Science and Technology of China, Chengdu, P.R.China

Riccardo Palamà (2016), currently post-doc, UCL, London UK

Master students:

Alessio Balleri, (2003), currently Radar Lecturer, Cranfield University, Defense Academy of the United Kingdom, UK.

Fortunato Molinu (2003), Fortunato Rizzo (2003)

Luca Berni (2004), Michele De Gregorio (2004), Luca Fiori (2004), Paolo Grandinetti (2004), Alessandro Gremoletti (2004), Andrea Lertora (2004), Valentina Ravenni (2004), Marco Bonuccelli (2004), Andrea Giorgetti (2005), Federico Pera (2005), Matteo Moncada (2005), Matteo Sardegnoli (2005), Emanuela Cerrone (2006), Salvatore Maresca (2006), Sandro Noto (2007), Pietro Stinco (2007), Antonino Giacalone (2007), Fusco Romualdo (2008), Giuseppe Ricciato (2008), Giovanni Serafino (2009), Serena Siragusa (2009), Sabrina Bonsignore (2009), Rosario D'Arrigo (2009), Sergio Pinna (2009), Riccardo Tinti (2009), Aurora Baruzzi (2010), Roberta Vassallo (2010), Giuseppe Arena (2011), Marco La Manna (2011), Letizia Costanza (2013)

HONORS/AWARDS

- 2003 IEEE Aerospace and Electronic Systems Society's Barry Carlton Award for 2001 Best Paper for the paper (co-authored with P. Lombardo, F. Gini, A. Farina, and B. Billingsley) published in the July 2001 issue of the *IEEE Transactions on Aerospace and Electronic Systems*.
- 2008 2008 IEEE Aerospace and Electronic Systems Society's Fred Nathanson Young Engineer of the Year Award for contributions to signal processing, estimation, and detection theory.
- 2011 IEEE Fellow since January 2011
- 2011 "Premio Francesco Carassa" Best Paper Award in the Remote Sensing area for the paper co-authored with P. Stinco, F. Gini and A. Farina, presented at the Annual GTTI Meeting, Taormina, July 2011.
- 2014 IEEE Signal Processing Society Distinguished Lecturer for the years 2014-2015.
- 2015 IEEE Aerospace and Electronic Systems Society Distinguished Lecturer for the years 2015-2016.
- 2015 2015 Innovation Award for the project COTRAMIS, MBDA, Rome, Italy.
- 2016 IEEE Aerospace and Electronic Systems Society's Barry Carlton Award for 2012 Best Paper for the paper (co-authored with J. Sangston, and F. Gini) published in the January 2012 issue of the *IEEE Transactions on Aerospace and Electronic Systems*.

NATIONAL AND INTERNATIONAL LEADERSHIP ROLES

- June 14-Present - **Chair** of the *IEEE AESS Radar Systems Panel*.
- Jan. 14-Dec. 15 - **Chair** of the *IEEE Picard Medal Award Committee*.
- Jan. 13-Present - **Chair** of the *IEEE AESS Fellow Identification Committee*.
- Sept. 15-Present - **Chair** of the EURASIP Special Area Team on Signal Processing for Multisensor Systems (*SAT-SPMuS*).
- Jan. 12-Present - Member of the **Board of Governors** of *AES Society* (2012-2017).
- Jan. 15-Present- Member of the **Board of Governors** of *SP Society* (2015-2017).
- Jan. 15- Present - Member of the **IEEE Fellow Evaluation committee**.

- **Lead guest editor** of the special issue “*Modelling and Processing of Radar Signals for Earth Observation*” on *International Journal of Navigation and Observation*, August 2008.
- **Lead guest editor** of the special issue “*Advances in Signal Processing for Radar Applications*” on *IEEE Journal of Special Topics on Signal Processing*, December 2015.
- Jan. 15-Present- **Editor in Chief** of *IEEE Aerospace and Electronic Systems Magazine*.
- **General co-Chair** of the 2007 *Waveform Diversity & Design Conference (WDD07, Pisa, Italy)*
- **General Co-Chair** of the *IEEE CAMSAP2011 (San Juan, Puerto Rico)*
- **Technical co-Chair** of *CoSeRa 2015 (Pisa, Italy)*
- **Technical co-Chair** of the *2010 International Workshop on Cognitive Information Processing (Elba Island, Italy)*
- **Organizer** of the *EURASIP seminar day on Radar Signal Processing, 25 Sept. 2009 (Pisa, Italy)*
- **Co-organizer** of the *1st EURASIP PhD School on Radar Signal Processing (Pisa, September 2014)*.
- **Area Chair** of *EUSIPCO 2013 (Marrakech, Morocco)*
- **Area Chair** of *EUSIPCO 2014 (Lisbon, Portugal)*
- **Area Chair** of *EUSIPCO 2015 (Nice, France)*
- **Area Chair** of *EUSIPCO 2017 (Kos, Greece)*
- **Principal Investigator** of the project “Sistema integrato per la sicurezza di strutture sensibili” *PRA 2015, funded by University of Pisa, Italy.*
- **Principal Investigator** of the project “Coherent detection of radar targets in non-Gaussian sea clutter”, funded by Navico S.r.l., Italy.
- **Principal Investigator** of the project LORD, “Low Speed Target Detection by Using Active Radar Homing Systems”, funded by MBDA, Rome, Italy.
- **Principal Investigator** of the project “Waveform Diversity and Frequency Sharing Techniques for Cognitive Radar Systems”, *funded by European Office of Aerospace Research and Development, grant number FA8655-13-1-3011.*
- **Principal Investigator** of the project “X-band radar detection of low RCS targets with scan-to-scan integration”, *funded by Consilium Italy S.r.l., Italy*
- **Principal Investigator** of the project “Posterior Cramér-Rao Lower Bounds for Bistatic radar tracking”, *funded by SELEX-Sistemi Integrati, Roma, Italy.*
- **Principal Investigator** of the project SPREWS, *funded by SELEX-Sistemi Integrati, Roma, Italy.*
- **Principal Investigator** of the project “Performance evaluation of WERA HF radar for ship detection”, *funded by NURC, NATO, La Spezia, Italy.*
- **Principal Investigator** of the project “Detection and tracking techniques of radar targets in presence on wind farm clutter”, *funded by SELEX-Sistemi Integrati, Roma, Italy.*

- **Principal Investigator** of the project “Waveform diversity and design for interoperating radar systems”, *funded by European Office of Aerospace Research and Development, grant number FA8655-07-1-3096.*
- **Principal Investigator** of the project “2D-CFAR techniques for 3D radars”, *funded by Reinmethall, Roma, Italy*

EXPERTISE AND GENERAL INTERESTS

Dr. Greco’s professional expertise encompasses statistical signal processing, estimation and detection theory, statistical methods for data analysis, non Gaussian signal detection and estimation with applications to radar systems. She co-authored about 70 journal papers, more than 100 conference papers and 9 book chapters.

CURRENT RESEARCH GOALS

- Detection and estimation of radar signals in non-Gaussian clutter;
- Monostatic and bistatic high resolution sea clutter analysis and modeling;
- Cognitive radars and waveform design;
- Multistatic active and passive radar systems;

PROJECTS AND FUNDING

Since 1997 Dr. Greco participated in or led many national and international projects/contracts. The main ones are listed below.

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|----------------|---|
| <u>2017-19</u> | <i>"Robust Hypothesis Testing for Radar Applications"</i> , funded by European Office of Aerospace Research and Development (EOARD), grant number FA9550-17-1-0065. |
| <u>2016</u> | <i>"Knowledge – Based Radar for Target Detection and Identification – Kbaret Study,"</i> funded by European Defence Agency (EDA). |
| <u>2015</u> | <i>"Sistema integrato per la sicurezza di strutture sensibili"</i> PRA 2015 (<i>Principal Investigator</i>), funded by University of Pisa, Italy. |
| <u>2015</u> | <i>"Coherent detection of radar targets in non-Gaussian sea clutter"</i> , (<i>Principal Investigator</i>), funded by Navico S.r.l., Italy. |
| <u>2014</u> | COTRAMIS, <i>"Cognitive Tracking Radar Architecture for RF Missile Seeker"</i> funded by MBDA, Rome, Italy. |
| <u>2014</u> | LORD, <i>"Low Speed Target Detection by Using Active Radar Homing Systems"</i> (<i>Principal Investigator</i>), funded by MBDA, Rome, Italy. |

- 2013-2015 CAESARIS, *"Cognitive Airborne multisensor System for Aerial Reconnaissance Intelligence and Surveillance"*, funded by FP7-SME-2013.
- 2013-2017 *"Waveform Diversity and Frequency Sharing Techniques for Cognitive Radar Systems"*, (Principal Investigator) funded by European Office of Aerospace Research and Development (EOARD), grant number FA8655-13-1-3011.
- 2013 *"X-band radar detection of low RCS targets with scan-to-scan integration"*, (Principal Investigator), funded by Consilium Italy S.r.l.
- 2012-2013 FARADAYS, *"Frequency Sharing Techniques for Future Radars"* funded by SELEX-Sistemi Integrati., Roma, Italy
- 2011-2012 *"Posterior Cramér-Rao Lower Bounds for Bistatic radar tracking"*, (Principal Investigator), funded by SELEX-Sistemi Integrati., Roma, Italy
- 2009-2011 *Integrated sensor network for homeland security*, funded by Finmeccanica - SESM, Roma, Italy
- 2009-2011 SPREWS (Principal Investigator), funded by SELEX-Sistemi Integrati., Roma, Italy.
- 2009 *Performance evaluation of WERA HF radar for ship detection*, (Principal Investigator), funded by NURC, NATO, La Spezia, Italy.
- 2008-2009 *Detection and tracking techniques of radar targets in presence on wind farm clutter* (Principal Investigator), funded by SELEX-Sistemi Integrati, Roma, Italy
- 2007-2012 *Waveform diversity and design for interoperating radar systems*, (Principal Investigator) funded by European Office of Aerospace Research and Development, grant number FA8655-07-1-3096.
- 2007-2008 *2D-CFAR techniques for 3D radars*, (Principal Investigator) funded by Reinmethall, Rome, Italy.
- 2006-2007 *Techniques for range and frequency resolution in radar system*, funded by SELEX-Sistemi Integrati, Rome, Italy.
- 2005-2008 *Airborne radar and ground-based radar data fusion*, funded by Finmeccanica - SESM, Roma, Italy.
- 2005-2006 *High resolution radar clutter analysis and modelling for advanced target detection strategies*, funded by Air Force Office of Scientific Research, USAF, grant number FA8655-06-1-3010.
- 2004-2005 *Statistical analysis and modelling of high resolution ground radar clutter and targets*, funded by United States Army Research, Development, and Standardization Group (USARDSG).
- 2004-2005 *High resolution radar clutter analysis and modelling for advanced target detection strategies*, funded by Air Force Office of Scientific Research, USAF, grant number FA8655-04-1-3059

- 2004-2005 *Pseudo-monopulse, moving window and monopulse techniques for DOA estimation in radar systems, funded by Alenia-Marconi Systems (AMS).*
- 2003-2004 *Radar detection in presence of deception signals, funded by Alenia-Marconi Systems (AMS).*
- 2003-2004 *Signal processing algorithms for anti-collision laser systems, funded by Marconi Selenia Communications.*
- 2001-2006 *Object oriented simulation and novel technologies for the modelling of complex environmental systems, INTERREG III-A project, funded by European Community (EU).*
- 2002-2003 *Non Cooperative Target Recognition, funded by Alenia-Marconi Systems (AMS).*
- 2000-2002 *Sea surface modeling for remote sensing, Project MURST "Young researchers".*
- 2000 *Radar Theory and Techniques, preparation of educational CDs in the framework of the TELECOM project funded by the Tuscany Region (Italy).*
- 1997-2000 *Novel methodologies for the integration, processing, and analysis of data from spaceborne sensors for the monitoring of the hydrosphere, rainfall phenomena, and of the ground, funded by the Italian Space Agency (ASI).*

Project Committee

- 2012-2014 - Projects reviewer for the Qatar foundation.
- 2015-2017 - Projects reviewer for the Swedish Research Council.
- 2016 - Projects reviewer for the Austrian Academy of Sciences.

SERVICES

Professional Society

Since the beginning of her career and in particular in the last 10 years, Dr. Greco has been deeply involved in multiple activities of IEEE and EURASIP (and other professional societies) as proved by the list below:

- Member of CNIT and GTTI since 2000.
- Member of EURASIP since 2005.
- IEEE Member since 1994.
- IEEE Senior member since June 2004.
- IEEE Fellow since January 2011.
- IEEE Signal Processing Society Distinguished Lecturer for the years 2014-2015.
- IEEE Aerospace and Electronic Systems Distinguished Lecturer for the years 2015-2016.

- Jan. 10-Dec. 15 - Member of the *IEEE Sensor Arrays and Multichannel Signal Processing Technical Committee (SAM- TC)* and chair of the *EDU Subcommittee*.
- Jan. 09-Dec. 14- Member of the *IEEE Signal Processing Theory and Method Technical Committee (SPTM- TC)*.
- Jan 08-Present - Member of the *IEEE AESS Radar Systems Panel*.
- June 11-May 14 - Vice-chair of the *IEEE AESS Radar Systems Panel*.
- June 14-Present - Chair of the *IEEE AESS Radar Systems Panel*.
- Oct. 11-Oct.16 - Member of the *IEEE Picard Medal Award Committee*.
- Jan. 14-Dec. 15 - Chair of the *IEEE Picard Medal Award Committee*.
- Jan. 12-Present - Member of the *Board of Governors of AES Society (2012-2017)*.
- Jan. 15-Present - Secretary of the *Board of Governors of AES Society*.
- Jan. 15-Present - Chair of the *IEEE AESS Fellow Identification Committee*.
- Jan. 15-Present- Member of the *Board of Governors of SP Society (2015-2017)*.
- Jan. 13-Present- Representative for IEEE AESS in the *IEEE Division IX*.
- Jan. 16- Present - Member of the *IEEE SPS TC review committee*.
- Jan. 16 - Present - Member of the *IEEE SPS Education committee*.
- Jan. 15- Present - Member of the *IEEE Fellow Evaluation committee*.
- Jan.16- Present - Member of the *IEEE Fellow Strategic Plan sub-Committee*.
- Sept. 15-Present - Chair of the EURASIP Special Area Team on Signal Processing for Multisensor Systems (*SAT-SPMuS*).
- 2010-2013 Italian Representative at *NATO SET-164 on Passive Sensors*.
- 2014-2016 Italian Representative at *NATO SET-207 on Advanced situation-specific modeling, sensing and vulnerability mitigation using passive radar technology*.

Editorial Services

- Guest co-editor of the special issue "*Adaptive Waveform Design for Agile Sensing Communications*" on *IEEE Journal of Selected Topics on Signal Processing*, June 2007.
- Lead guest editor of the special issue "*Modelling and Processing of Radar Signals for Earth Observation*" on *International Journal of Navigation and Observation*, August 2008.
- Lead guest editor of the special issue "*Advances in Signal Processing for Radar Applications*" on *IEEE Journal of Special Topics on Signal Processing*, December 2015.
- Guest co-editor of the special cluster on "*Signal and Information Processing Education*", on *IEEE Signal Processing Magazine*, 2016.
- April 08-Present- Editorial board member of *IET Radar, Sonar and Navigation (IET-RSN)*.
- April 08-Present- Associate Editor of *Journal of Advances in Signal Processing (JASP)*.
- April 09-Aug. 13- Associate Editor of *IEEE Transactions on Signal Processing (TSP)*.

- Nov. 09- Dec 14- Associate Editor of *IEEE AE Systems Magazine*.
- May 10-Dec. 14- Associate Editor in Chief of *IEEE AE Systems Magazine*.
- Jan. 15-Present- Editor in Chief of *IEEE AE Systems Magazine*.
- Jan. 14-Present- Senior Editorial board member of *IEEE Journal on Selected Topics of Signal Processing (J-STSP)*.
- Jan. 16- Present - Senior Area Editor of *IEEE Transactions on Signal Processing (TSP)*.
- Nov. 16-Present - Associate Editor of *IET Signal Processing*.
- Regular reviewer for the following international journals:
IEEE Trans. on Aerospace and Electronics Systems; IEEE Trans. on Signal Processing; IEEE Trans. on Antennas and Propagation; IEEE Signal Processing Letters, IEEE Trans. on Geoscience and Remote Sensing, IEEE Journal of Selected Topics on Signal Processing, IET Radar, Sonar and Navigation (former IEE Proceedings - Radar, Sonar and Navigation), IEE Proceedings - Vision, Image and Signal Processing; Electronics Letters; Signal Processing (Elsevier), Journal of Advances in Signal Processing, Digital Signal Processing, IEEE Sensors, IEEE AE Systems Magazine, IET Signal Processing, IEEE Journal on Selected Topic of Signal Processing.

Conference Organization and Services

- Publications Chair of the Conference *EUSIPCO 2006 (Florence, Italy)*
- General co-Chair of the *2007 Waveform Diversity & Design Conference (Pisa, Italy)*
- Technical Committee member of *EUSIPCO 2007 (Poznan, Poland)*
- Paper Management Chair of the *IEEE Radar Conference 2008 (Rome, Italy)*
- Technical Committee member of *EUSIPCO 2008 (Lausanne, Switzerland)*
- Technical Committee member of *the 2008 Conference Computational Advances in Processing Remote Sensing Imagery (Mexico City, Mexico)*
- Publications and Publicity Chair of *CAMSAP 2009 (Aruba, Dutch Antilles)*
- Technical Committee member of *Waveform Diversity & Design 2009 Conference (Orlando, FL, USA)*
- Organizer of the *EURASIP seminar day on Radar Signal Processing, 25 Sept. 2009 (Pisa, Italy)*
- Technical co-Chair of the *2010 International Workshop on Cognitive Information Processing (Elba Island, Italy)*
- Technical Committee member of *6th IEEE Sensor Array and Multichannel Signal Processing Workshop, SAM 2010 (Kibutz Ma'ale Hahamisha, Israel)*
- General Co-Chair of *CAMSAP 2011 (San Juan, Puerto Rico)*
- Area Chair of *EUSIPCO 2013 (Marrakech, Morocco)*
- Technical Committee member of *CAMSAP 2013 (Saint Martin)*

- Technical Committee member of *International Radar Symposium IRS-2014 (Litv, Ukraina)*
- Organizing Committee member of *SAM 2014 (A Coruna, Spain)*
- Area Chair of *EUSIPCO 2014 (Lisbon, Portugal)*
- Co-organizer of the *1st EURASIP PhD School on Radar Signal Processing (Pisa, September 2014)*
- Area Chair of *EUSIPCO 2015 (Nice, France)*
- Technical co-Chair of *CoSeRa 2015 (Pisa, Italy)*
- Special Sessions Chair of *CAMSAP 2015 (Cancun, Mexico)*
- Publicity Chair of *SAM 2016 (Rio de Janeiro, Brazil)*
- Co-organizer of the special session "Advances in Waveform Design and Parameter Estimation" at *2010 European Wireless Conference, Lucca, Italy*
- Co-organizer of the special session "Waveform Diversity for Advanced Radar Systems" at *EUSIPCO 2010, Aalborg, Denmark*
- Organizer of the special session "Multistatic sensor networks for radar applications" at *SAM 2012, Hoboken, NJ, USA*
- Co-organizer of the special session "Cognitive radio and radar networks" at *CAMSAP 2013, Saint Martin*
- Co-organizer of the special session "Clutter modelling and interference suppression in bistatic radar systems" at *EuRAD 2014 Rome, Italy*
- Co-organizer of the special session "Advanced Signal Processing for Radar Applications" at *EUSIPCO 2015, Nice, France*
- Co-organizer of the special session "Waveform Diversity" at *2015 IEEE International Radar Conference, Washington DC, USA*
- Co-organizer of the special session "Bayesian Detection and Estimation Techniques for Radar Applications" at *SSP 2016, Palma de Mallorca, Spain.*
- Co-organizer of the special session "Signal Processing for Multisensor Systems", at *SAM 2016, Rio de Janeiro, Brazil.*
- Co-organizer of the special session "Waveform and array optimization for multistatic/MIMO radar", at *ASILOMAR 2017, Pacific Grove, USA.*
- **UNIVERSITY**
 - Jan. 2005- Present - Scientific Responsible of the Signal Processing Laboratory, Dept. of Information Engineering, University of Pisa.
 - Jan. 2016 -Present - CAI (Responsible of Internationalization and ERASMUS Program) for the Dept. of Information Engineering, University of Pisa.

- **Department committees:**

1998-Present. Member of Graduate committees and Advisor of Laurea Theses

2003-Present, Member of the "Piani di studio Committee" of the "Corso di Laurea" in Telecommunication Engineering.

2004-2010 - Member and Secretary of the Permanent Committee of the Ph.D. in Remote Sensing, University of Pisa.

September 2007 -Present - Member of the Permanent Committee of the Ph.D. in Information Engineering, University of Pisa.

- **Faculty committees:**

2001-2003. Member of the "Orario Committee" of the Faculty of Engineering.

2003-2004 - Member of the Admission Test committee of the Faculty of Engineering, University of Pisa.

2005-2012 - Member of the "Autovalutazione" committee of the "Corso di Laurea Specialistica" in Applied Geophysics, University of Pisa

2005-2012- Member of the "Didattica" committee of the "Corso di Laurea Specialistica" in Applied Geophysics, University of Pisa

2010-2011 - Member of the Admission Test committee of the Faculty of Engineering, University of Pisa.

Short courses/Invited lecturers

- *"Coherent radar detection against Compound-Gaussian clutter with time-varying texture model,"* Georgia Tech Research Institute, Atlanta, Georgia, USA, May 1998
- *"Radar detection against Compound-Gaussian clutter with time-varying texture,"* University of Pisa, Italy, July 1998
- *"Multiple target estimation by exploiting the amplitude modulation induced by antenna scanning,"* Alenia Marconi Systems, Roma, Italy, July 2002
- *"Analysis and modeling of acoustic signals emitted by Mediterranean Bottlenose dolphins,"* SACLANT, La Spezia, Italy, February 2004
- *"High resolution sea clutter and CFAR techniques,"* GEM, San Benedetto del Tronto, Italy, November 2004
- *"Analysis of acoustic signals emitted by Mediterranean Bottlenose Dolphins"* University of Pisa, Dept. of Ingegneria dell'Informazione, Italy, November 2004
- *"Radar detection in presence of deception signals"* Alenia Marconi Systems, Roma, Italy, December 2004

- “*Radar clutter modeling*”, advanced tutorial (3 h), *2005 Radar Conference*, Arlington, USA, Maggio 2005.
- “*High resolution land and sea clutter: analysis of Phase-One (MIT-LL) and IPIX (McMaster University) data*”, annual meeting of the Italian Telecommunication and Information Theory Group, Reggio Calabria, Italy, June 2005.
- “*Sea and ground high resolution clutter modeling*”, University College London, UK, June 2006.
- “*High Resolution Radar Clutter Analysis and Modeling for Advanced Target Detection Strategies*” EOARD meeting, London, UK, November 2006.
- “*Sea and Land Radar Clutter Modeling*”, tutorial (3 h), 2008 IEEE Radar Conference, Rome, Italy, May 2008.
- “*Radar Signal Processing for Homeland Security*”, Workshop Fondazione U. Tiberio, Italian Navy, Livorno, Italy, May 2009.
- “*Extraction and Statistical Analysis of Sea Clutter Spikes*”, IEE One day seminar on Radar Clutter, Paris, France, June 2009.
- “*Statistical Analysis of Data Measured by the HF Surface Wave Radar WERA*”, NURC, La Spezia, March 2010.
- “*Radar Clutter Modelling and Coherent Target Detection*”, course of 38 h for the Master of Engineering in Radar and Electronic Defence, University of Cape Town, South Africa, July 2011, June 2013 and June 2015.
- “*Radar Clutter Modelling and Adaptive Target Detection*”, School of Information and Electronics, Beijing Institute of Technology (BIT), Beijing, China, October 2011.
- “*Sea and Land Radar Clutter Modeling*”, tutorial (4 h), 2012 IEEE Radar Conference, Atlanta, USA; May 2012.
- “*RF and digital components for highly-integrated low-power radar*”, tutorial (4 h), 2012 IEEE Radar Conference, Atlanta, USA; May 2012.
- “*New Advances on Radar Detection in Presence of Non-Gaussian Clutter*”, **plenary speech** at 2012 International Workshop on Mathematical Issues in Information Sciences (MIIS2012), Xi'an, China, July 2012
- “*Research Funding in Information Sciences*”, panel at 2012 International Workshop on Mathematical Issues in Information Sciences (MIIS2012), Xi'an, China, July 2012
- “*Emerging Techniques in Radar Applications*”, panel at 2012 International Workshop on Mathematical Issues in Information Sciences (MIIS2012), Xi'an, China, July 2012
- “*Advanced Radar Detection in Non-Gaussian Clutter*”, **distinguished lecture**, Drexel University, Philadelphia (May 2014), Villanova University, Villanova (May 2014), Supélec, Paris (June 2014), Georgia Tech Research Institute, Atlanta (November 2014),

Washington University in St. Louis, St. Louis (November 2014), University of Athens, Athens (January 2015), University of Salt Lake City, Salt Lake City (March 2015), Technical University of Darmstadt, Germany (April 2015), Farmingdale, US (October 2016), Guangzhou, China (October 2016).

- "*Sensor Selection in Radar Networks*", **distinguished lecture**, ASU, Phoenix (March 2015), UCLA, Los Angeles (March 2015), Technical University of Darmstadt, Germany (April 2015), Stony Brook University, US (October 2016).
- "*High Resolution Sea and Land Clutter Modeling and analysis*", tutorial (4 h), 2015 IEEE International Radar Conference, Washington DC, USA; May 2015.
- "*Modeling and Mismatching in Radar Applications: Parameters Estimation and Bounds*", **distinguished lecture**, CentraleSupélec, Paris, France (June 2015).
- "*Optimum, Suboptimum and Adaptive Coherent Detection in Non-Gaussian Disturbance*", tutorial (2.5 h), 2015 IET International Radar Conference, Hangzhou, China; October 2015.
- "*Bistatic Active and Passive Radar Systems*", tutorial (4 h), 2016 IEEE Radar Conference, Philadelphia, USA, May 2016. An updated version has been accepted at 2017 IEEE Radar Conference, Seattle, USA, May 2017.
- "*Radar Performance in Clutter -modelling, simulation and target detection methods*", short course (4h), EuRAD conference, London, UK, October 2016.
- "*Cognitive Radars: Some Applications*", **invited speech**, 2016 Global Conference on Signal and Information Processing (GlobalSIP), Washington DC, December 2016.

Other Teaching Activities

Jan.–Apr. 2001 *Digital Communications*, within the IFTS 2000/01 formation program entitled "Telecommunication technician expert in telecommunication networks and multimedia systems," funded by the Tuscany Region and co-organized by the University of Pisa.

Jan.–Mar. 2001 *Radar detection in the presence of clutter*, Ch. 4 of the educational CD "Radar Theory and Techniques," within TELECOM project.

Dec. 04 – May 05 *Elaborazione del Segnale Sonar* (Sonar Signal Processing), "Master Universitario di II livello in Elettroacustica Subacquea e Sue Applicazioni", University of Pisa, Italy.

Dec. 10 – May 11 *Elaborazione del Segnale Sonar* (Sonar Signal Processing), "Master Universitario di II livello in Elettroacustica Subacquea e Sue Applicazioni", University of Pisa, Italy.

Nov. 16 – May 17 *Elaborazione del Segnale Sonar* (Sonar Signal Processing), "Master Universitario di II livello in Elettroacustica Subacquea e Sue Applicazioni", University of Pisa, Italy.

June 2011, July 2013, and June 2015

"Radar Clutter Modelling and Coherent Target Detection", course of 38 h (adjoint professor) for the Master of Engineering in Radar and Electronic Defence, University of Cape Town, South Africa.

SCIENTIFIC COLLABORATIONS AND RELATED PUBLICATIONS

Over last 20 years, Dr. Greco has established and developed many cooperations with national and international renowned researchers as detailed below:

- Dr. **Barry J. Billingsley**, Massachusetts Institute of Technology, Lincoln Laboratory, Lexington, Massachusetts, USA [J8], [J15], [J16], [C9], [C12].
- Dr. **Stefano Coraluppi**, Dr. **Raffaele Grasso**, and Dr. **Paolo Braca**, NATO Undersea Research Center (NURC), La Spezia, Italy [J56], [J59], [C47], [C56], [C57], [C63], [C64], [C86], [C88], [C91], [C93], [C98], [C99], [C100].
- Dr. **Alfonso Farina**, SELEX-Sistemi Integrati, Rome, Italy [J4], [J5], [J6], [J7], [J8], [J9], [J13], [J14], [J15], [J16], [J21], [J22], [J24], [J25], [J27], [J32], [J33], [J35], [J37], [J40], [J41], [J43], [J45], [J47], [J48], [J50], [J57], [B1], [B3], [C3], [C4], [C5], [C6], [C7], [C9], [C10], [C11], [C12], [C14], [C15], [C16], [C17], [C18], [C21], [C25], [C32], [C34], [C37], [C39], [C40], [C41], [C44], [C46], [C49], [C52], [C53], [C55], [C59], [C62], [C66], [C68], [C69], [C73], [C75], [C77], [C79], [C80], [C81], [NC1].
- Prof. **Georgios B. Giannakis**, Department of Electrical and Computer Engineering, University of Minnesota, Minneapolis, MN, USA [J18].
- Prof. **Hugh Griffiths**, University College London, UK [C105].
- Prof. **Simon Haykin**, McMaster University, Ottawa, Canada [B2].
- Prof. **Mike Inggs** and Prof. **Daniel O'Hagan**, University of Cape Town, South Africa [J53], [C76].
- Dr **Peter H. Lee**, TRW, Space & Technology Division, Space & Electronics Group, Redondo Beach, CA, USA [J4].
- Prof. **Pierfrancesco Lombardo**, Dept. "INFOCOM", University of Rome "La Sapienza," Rome, Italy [J6], [J13], [J16], [C3], [C4], [C7], [C9].
- Prof. **Frederic Pascal** and Dr. **Romaine Couillet**, CentraleSupélec, Paris-Saclay, Paris, France [C103].

- Dr. **Muralidhar Rangaswamy** and Dr. **Braham Himed**, Air Force Research Laboratory, Rome, USA. [J28], [J35], [J39], [J44], [J63], [J65], [J66], [B3], [C29], [C30], [C43], [C59], [C90], [C101], [C108].
- Dr. **Kevin J. Sangston**, Georgia Tech Research Institute, Atlanta, GA, USA [J7], [J42], [C5], [C7], [C10], [C58], [C60], [C96], [B7].
- Dr. **Simon Watts**, Thales, Visiting Professor in Electronic and Electrical Engineering at University College London, UK [J34], [B4], [C54].
- Prof. **Ami Wiesel**, The Hebrew University of Jerusalem, Israel [J51], [C84].
- Prof. **Tong G. Zhou**, School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, GA, USA [J18].
- Prof. **Abdelhak Zoubir**, Technische Universitat Darmstadt, Germany [J36], [C43], [C56], [C57], [C64].

DETAILED RESEARCH ACTIVITY

Dr. Greco's research activities focuses on problems of statistical signal processing with particular attention to radar applications. The main past and present research themes can be grouped as follows,:

- **Modeling and statistical analysis of recorded live sea and ground radar clutter data, in both monostatic and bistatic systems, passive and active.** This activity has been partially supported over the year by the projects "*Novel methodologies for the integration, processing, and analysis of data from spaceborne sensors for the monitoring of the hydrosphere, rainfall phenomena, and of the ground*" funded by the Italian Space Agency (ASI), and AFOSR grant on "*High resolution radar clutter analysis and modelling for advanced target detection strategies*". This topic, particularly regarding passive radars, has been one of main focuses of the *NATO SET-164* and *NATO SET-207* for which Dr. Greco is the Italian Representative. This research activity has produced over the years many publications in cooperation with researchers of Alenia-Marconi Systems-Finmeccanica, MIT Lincoln Laboratory, TRW, Defense Research Establishment Ottawa (DREO), University College London (UCL), University of Cape Town (UCT). [J4], [J5], [J8], [J11], [J15], [J16], [J18], [J19], [J23], [J28], [J29], [J34], [J38], [J39], [J53], [J58], [B2], [B4], [C6], [C7], [C12], [C13], [C14], [C19], [C24], [C27], [C29], [C30], [C31], [C35], [C45], [C47], [C50], [C56], [C76], [C85], [C92].
- **Optimum, adaptive and robust detection and estimation of radar signals in non-Gaussian clutter.** This research activity has been carried out in cooperation with researchers of Alenia-Marconi Systems (now SELEX-SI), Georgia Tech Research Institute (GTRI). [J2], [J3], [J6], [J7], [J9], [J10], [J12], [J13], [J14], [J17], [J20], [J30], [J36], [J42], [J51],

[J52], [J55], [J62], [J63], [J68], [C1], [C2], [C3], [C4], [C5], [C7], [C8], [C9], [C10], [C11], [C21], [C33], [C36], [C57], [C58], [C60], [C70], [C84], [C89], [C95], [C103], [C104], [C106], [C107].

- **Detection and estimation of multiple radar targets.** This work has been funded by Alenia-Marconi Systems (AMS) through the contract “*Non Cooperative Target Recognition.*” [J21], [J22], [J24], [J25], [J32], [B1], [C15], [C16], [C17], [C18], [C28], [C40].
- **Radar detection in presence of deception signals.** This work has been funded by Alenia Marconi Systems (AMS) through the contract “*Radar detection in presence of deception signals.*” [J27], [J33], [C25], [C32], [C34], [C37].
- **Cognitive radars and waveform diversity.** This work has been first funded by *European Office of Aerospace Research and Development*, through the project “*Waveform diversity and design for interoperating radar system*” then through the project “*Waveform Diversity and Frequency Sharing Techniques for Cognitive Radar Systems*” and by *SELEX-ES*, Rome, Italy, through the project FARADAYS, “*Frequency Sharing Techniques for Future Radars.*” [J35], [J41], [J50], [J54], [J61], [J64], [J66], [J67], [C38], [C39], [C41], [C52], [C53], [C59], [C61], [C65], [C67], [C68], [C69], [C77], [C80], [C82], [C87], [C90], [C94], [C97], [C101], [C102], [C108], [C109].

LIST OF PUBLICATIONS

Impact figure (as of January 30 2017)

h-index of Google Scholar: 30

i10-index: 60

Citations: 3118

University internal rating: 4/4

National Journals

- [J1] E. Dalle Mese, F. Gini, F. Lombardini, M. Greco, L. Verrazzani, "Sensori Multipli ed Integrazione dei Dati," *Alta Frequenza*, Vol. 6, No. 1, Gennaio-Febbraio 1994 (in Italiano).

International Journals

- [J2] F. Gini, **M. Greco**, L. Verrazzani, "Detection Problem in Mixed Clutter Environment as a Gaussian Problem by Adaptive Pre-Processing," *Electronics Letters*, vol. 31, No. 14, pp. 1189-1190, July 1995.
- [J3] G. Corsini, F. Gini, **M. Greco**, L. Verrazzani, "Cramér-Rao Bounds and Estimation of the Parameters of the Gumbel Distribution," *IEEE Transactions on Aerospace and Electronic Systems*, vol. 31, No. 3, pp. 1202-1204, July 1995.
- [J4] A. Farina, F. Gini, **M. Greco**, P.H.Y. Lee, "Improvement Factor for Real Sea-Clutter Doppler Frequency Spectra," *IEE Proceedings Part-F*, vol. 143, No. 5, pp. 341-344, October 1996.

- [J5] A.Farina, F. Gini, **M. Greco**, L. Verrazzani, "High Resolution Sea Clutter Data: Statistical Analysis of Recorded Live Data" *IEE Proceedings Part-F* , Vol. 144, No. 3, pp. 121-130, June 1997.
- [J6] F. Gini, **M. Greco**, A. Farina, P. Lombardo, "Optimum and Mismatched Detection Against K-Distributed plus Gaussian Clutter," *IEEE Transactions on Aerospace and Electronic Systems* , Vol. 34, No. 3, pp. 860-876, July 1998.
- [J7] K.J. Sangston, F. Gini, **M. Greco**, A. Farina, "Structures for Radar Detection in Compound Gaussian Clutter," *IEEE Transactions on Aerospace and Electronic Systems* , Vol. 35, No. 2, pp. 445-458, April 1999.
- [J8] J.B.Billingsley, A.Farina, F.Gini, **M. Greco**, L.Verrazzani "Statistical Analyses of Measured Radar Ground Clutter Data," *IEEE Transactions on Aerospace and Electronic Systems* , Vol. 35, No. 2, pp. 579-593, April 1999.
- [J9] F. Gini, **M. Greco**, A. Farina, "Clairvoyant and Adaptive Signal Detection in Non-Gaussian Clutter: a Data-Dependent Threshold Interpretation," *IEEE Trans. on Signal Processing*, Vol. 47, No. 6, pp. 1522-1531, June 1999.
- [J10] F.Gini, **M. Greco**, " Suboptimum Approach to Adaptive Coherent Radar Detection in Compound-Gaussian Clutter," *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 35, No. 3, pp. 1095-1104, July 1999.
- [J11] F. Berizzi, **M. Greco**, and L. Verrazzani, "A Fractal Approach for Sea Clutter Generation," *IEE Proceedings Part-F* , Vol. 147, No.4, pp. 189-198, August 2000.
- [J12] F. Gini, **M. Greco**, M. Diani, and L. Verrazzani "Performance Analysis of Two Adaptive Radar Detectors against Non-Gaussian Real Sea Clutter Data," *IEEE Transactions on Aerospace and Electronic Systems* , Vol. 36, No. 4, pp. 1429-1439, October 2000.
- [J13] F. Gini, **M. Greco**, A. Farina, P. Lombardo "Note on Optimum and Mismatched detection Against K-Distributed plus Gaussian Clutter," *IEEE Trans. on Aerospace and Electronic Systems* , Vol. 37, No.1, January 2001, pp.296-297.
- [J14] F. Gini, A. Farina, **M. Greco**, "Selected List of References on Radar Signal Processing" *IEEE Trans. on Aerospace and Electronic Systems*, Vol. 37, No. 1, January 2001, pp. 329-359.
- [J15] **M. Greco**, F. Gini, A. Farina, and J. B. Billingsley, "Validation of Windblown Radar Ground Clutter Spectral Shape," *IEEE Trans. on Aerospace and Electronic Systems*, Vol. 37, No. 2, April 2001, pp. 538-548.
- [J16] P. Lombardo, **M. Greco**, F. Gini, A. Farina, J.B. Billingsley, "Impact of Clutter Spectra on Radar Performance Prediction", *IEEE Trans. on Aerospace and Electronic Systems*, Vol. 37, No. 3, July 2001, pp. 1022-1038. (winner of B. Carlton award)
- [J17] **M. Greco**, F. Gini, M. Diani, "Robust CFAR detection of random signals in compound-Gaussian clutter plus thermal noise," *IEE Proceedings Part-F* , Vol. 148, No. 4, August 2001, pp. 227-232.
- [J18] F. Gini, G.B. Giannakis, **M. Greco**, and G. T. Zhou "Time-Averaged Subspace Methods for Radar Clutter Texture Retrieval," *IEEE Trans. on Signal Processing*, Vol. 49, No. 9, September 2001, pp. 1886-1898.
- [J19] F. Gini and **M. Greco**, "Texture Modelling, Estimation, and Validation Using Measured Sea Clutter Data," *IEE Proceedings-Part F*, Vol. 149, No. 3, pp.115-124, June 2002.

- [J20] F. Gini and **M. Greco**, "Covariance Matrix Estimation for CFAR Detection in Correlated Heavy-Tailed Clutter," *Signal Processing*, Special Issue, Vo. 82, No.12, pp. 1847-1859, December 2002.
- [J21] A. Farina, F. Gini and **M. Greco**, "DOA estimation by exploiting the amplitude modulation induced by antenna scanning," *IEEE Transaction on Aerospace and Electronic Systems*, Vol. 38, No.4, 1275-1286, October 2002.
- [J22] F. Gini, **M. Greco** and A. Farina, "Multiple Target Detection and Estimation by Exploiting the Amplitude Modulation Induced by Antenna Scanning. Part I: Parameter Estimation", *IEEE Transaction on Aerospace and Electronic Systems*, Vol. 39, No. 4, October 2003, pp.1316-1321.
- [J23] **M. Greco**, F. Bordoni, F. Gini, "X-band Sea Clutter Non-Stationarity: Influence of Long Waves," *IEEE Journal on Ocean Engineering*, Special Issue on "Non-Rayleigh Reverberation and Clutter", Vol.29, No. 2, April 2004, pp.269-283.
- [J24] **M. Greco**, F. Gini and A. Farina, "Asymptotical ML Estimation of Multiple Radar Targets: Performance I the Presence of Model Mismatch", *Signal Processing*, Vol. 84, No.6, June 2004, pp.969-979.
- [J25] F. Gini, A. Farina, **M. Greco**, "Radar Detection and Pre-Classification Based on Multiple Hypothesis," *IEEE Trans. on Aerospace and Electronic Systems*, Vol. 40, No.3, July 2004, pp. 1046-1059.
- [J26] **M. Greco**, F. Gini, "Analysis and Modeling of Echolocation Signals Emitted by Mediterranean Bottlenose Dolphins", *JASP*, Volume 2006, Issue 1, Article ID 25257, 10 pages.
- [J27] **M. Greco**, F. Gini, A. Farina, V. Ravenni, "Effect of Phase and Range Gate Pull-Off Delay Quantization on Jammer Signal," *IEE Proc. Radar, Sonar and Navigation*, Vo. 153, No. 5, October 2006, pp.454-459.
- [J28] **M. Greco**, F. Gini, M. Rangaswamy, "Statistical analysis of measured polarimetric clutter data at different range resolutions," *IEE Proc. Radar, Sonar and Navigation*, Vol. 153, No. 6, pp. 473-481, December 2006.
- [J29] **M. Greco**, F. Gini, "Statistical analysis of high resolution SAR ground clutter data," *IEEE Trans. on GRS*, Vol.45, No. 3, pp. 566-575, March 2007.
- [J30] Y. Norouzi, F. Gini, M.M. Nayeby, **M. Greco**, "Non coherent radar CFAR detection based on goodness-of-fit tests," *IET Radar, Sonar and Navigation*, Vol.1, No. 2, pp. 98-105, April 2007.
- [J31] A. Nehorai, F. Gini, **M. Greco**, A. P. Suppappola, M. Rangaswamy, "Introduction to the issue on adaptive waveform design for agile sensing and communication," *IEEE Journal of Selected Topics in Signal Processing*, Vol. 1, No. 1, pp. 2-5, January 2007.
- [J32] **M. Greco**, F. Gini, A. Farina, "Joint use of Sum and Delta Channels for Multiple Radar Target DOA Estimation," *IEEE Trans. on AES* , Vol. 43, No.3, pp. 1146-1154, July 2007.
- [J33] **M. Greco**, F. Gini, A. Farina, "Radar Detection and classification of jamming signals belonging to a cone class," *IEEE Transaction on Signal Processing*, Vol. 56, No. 5, pp. 1984-1993, May 2008.

- [J34] **M.Greco**, S. Watts, "Introduction to the Issue on Modelling and Processing of Radar Signals for Earth Observation", *International Journal of Navigation and Observation*, Vol. 2008.
- [J35] **M. Greco**, F. Gini, A. Farina, M. Rangaswamy, "DOA estimation and multi-user interference in a two-radar system", *Signal Processing*, Vol. 89, No.4, pp. 355-364, April 2009.
- [J36] A. Younsi, **M. Greco**, F. Gini, A. Zoubir, "Performance of the Adaptive Generalized Matched Subspace CFAR Detector in Non-Gaussian Noise: An Experimental Analysis", *IET Radar, Sonar and Navigation*, Vol.3, No. 3, pp. 195-202, June 2009.
- [J37] **M. Greco**, F. Gini, A. Farina, L. Timmoneri, "Direction-of-Arrival estimation in radar systems: Moving window against Approximate Maximum Likelihood estimator", *IET Radar, Sonar and Navigation*, Vol.3, No. 5, pp. 552-557, 2009.
- [J38] **M. Greco**, P. Stinco, F. Gini, "Identification and analysis of sea radar clutter spikes", *IET, Radar, Sonar and Navigation*, Special Issue on Radar Clutter, Vol. 4, No. 2, p. 239-250, April 2010.
- [J39] **M.Greco**, P.Stinco, F. Gini, M. Rangaswamy, "Impact of sea clutter non-stationarity on disturbance covariance matrix estimation and CFAR detector performance", *IEEE Trans. on Aerospace and Electronic Systems*, Vol. 46, No. 3, pp. 1502-1513, July 2010.
- [J40] S. Fortunati, A. Farina, F. Gini, A. Graziano, **M. Greco**, S. Giompapa, "Least squares estimation and Cramér-Rao type lower bounds for relative sensor registration process", *IEEE Trans. on SP*, Vol. 59, No.3, pp.1075-1087, 2011.
- [J41] **M. Greco**, F. Gini, P. Stinco, A. Farina "Cramér-Rao bounds and selection of bistatic channels for multistatic radar systems", *IEEE Trans. on Aerospace and Electronic Systems*, Vol. 47, No.4, pp. 2934-2948, 2011.
- [J42] K.J. Sangston, F. Gini, **M. Greco**, "Coherent radar detection in heavy-tailed compound-Gaussian clutter", *IEEE Trans. on Aerospace and Electronic Systems*, Vol. 42, No.1, pp. 64-77, January 2012 (winner of B. Carlton award).
- [J43] S. Fortunati, F. Gini, **M. Greco**, A. Farina, A. Graziano, S. Giompapa, "Impact of flight Disturbances on airborne radar tracking", *IEEE Trans. on Aerospace and Electronic Systems*, Vol. 48, No.3, pp. 2698-2710, 2012
- [J44] P. Stinco, **M. Greco**, F. Gini, M. Rangaswamy "Ambiguity Function and Cramér-Rao Bounds for Universal Mobile Telecommunications System- Based Passive Coherent Location Systems" *IET Radar, Sonar and Navigation*, Vol.6, No.7, pp. 668-678, 2012.
- [J45] S. Fortunati, F. Gini, **M. Greco**, A. Farina, A. Graziano, S. Giompapa, "On the Identifiability Problem in the Presence of Random Nuisance Parameters", *Signal Processing, Elsevier*, Vol. 92, No. 10, pp.2545-2551, October 2012.
- [J46] **M. Greco**, "From the Associate Editor in Chief", *IEEE AES Systems Magazine*, November 2012, p. 3.
- [J47] S. Fortunati, F. Gini, **M. Greco**, A. Farina, A. Graziano, S. Giompapa, F. Castella, "Correction of Refracted Propagation Effects for Airborne Radar Tracking", *IEEE Trans. on Aerospace and Electronic Systems*, Vol. 49, No.1, pp.20-41, Jan 2013.

- [J48] S. Fortunati, F. Gini, **M. S. Greco**, A. Farina, A. Graziano, S. Giompapa, "Corrigendum to 'On the identifiability problem in the presence of random nuisance parameters,'" *Signal Processing*, Vol. 93, No. 1, Page 361, January 2013.
- [J49] S. Fortunati, F. Gini, A. Farina, **M. Greco**, "On the application of the EM algorithm to the relative sensor registration problem", *IET Radar, Sonar and Navigation*, Vol. 7, No. 2, pp.191-203, 2013.
- [J50] P. Stinco, **M. Greco**, F. Gini, A. Farina, "Posterior Cramér-Rao lower bounds for passive bistatic radar tracking with uncertain target measurements", *Signal Processing*, Vol.93, No.12,pp.3528-3540, December 2013.
- [J51] T. Zhang, A. Wiesel, **M. Greco**, "Convexity of the Maximum Likelihood Estimator for the Multivariate Generalized Gaussian Distribution", *IEEE Trans. on Signal Processing*, Vol. 71, No. 16, pp. 4141-4148, 2013.
- [J52] **M. Greco**, F. Gini, " Cramér-Rao Lower Bounds on Covariance Matrix for Complex Elliptically Symmetric distributions ", *IEEE Trans. on Signal Processing*, Vol. 61, No.24, December 2013, pp. 6401-6409.
- [J53] M. Malanowski, R. Haugen, **M. Greco**, D. W. O'Hagan, R. Plsek, A. Bernard, "Land and sea clutter from FM-based passive bistatic radars", *IET Radar Sonar and Navigation*, special issue on " Bistatic and MIMO radars and their applications in surveillance and remote sensing", vol. 8, No.2, pp. 160-166, February 2014.
- [J54] P. Stinco, **M. Greco**, F.Gini, M. La Manna, " Noncooperative Radar Recognition in Multistatic Radar Systems", *IET Radar, Sonar and Navigation*, vol. 8, No. 4, pp. 396-405, April 2014.
- [J55] **M. Greco** S. Fortunati, F. Gini, "Maximum Likelihood Covariance Matrix Estimation for Complex Elliptically Symmetric Distributions under Mismatched Condition", *Signal Processing*, Vol. 104, pp. 381-386, November 2014.
- [J56] S. Fortunati, R. Grasso, F.Gini, **M.Greco**, K. LePage, "Single Snapshot DOA Estimation by Using Compressed Sensing", *EURASIP Journal on Advances in Signal Processing* for the special issue on "Sparse Sensing in Radar and Sonar Signal Processing", DOI: 10.1186/1687-6180-2014-120.
- [J57] R. Palamà, **M. Greco**, F. Gini, P. Stinco, "Statistical Analysis of Bistatic and Monostatic Sea Clutter", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 51, N.4, pp.3036 - 3054, October 2015.
- [J58] **M. S. Greco**, Y. Abramovich, J.-P. Ovarlez, H. Li, X. Yang, "Introduction to the Issue on Advanced Signal Processing Techniques for Radar Applications," *IEEE Journal of Selected Topics in Signal Processing*, Vol. 9, No. 8, pp. 1363 - 1365, December 2015.
- [J59] R. Grasso, P.Braca, S.Fortunati, F.Gini, **M.S. Greco**, "Dynamic Underwater Glider Network for Environmental Field Estimation", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 52, No. 1, pp. 379-395, February 2016.
- [J60] S. Fortunati, F. Gini, **M. S. Greco**, A. Farina, A. Graziano, S. Giompapa, "An improvement of the state-of-the-art covariance-based methods for statistical anomaly detection algorithms", *Signal, Image and Video Processing*, Vol. 10, No 4, 1 April 2016, Pages 687-694

- [J61] P. Stinco, **M. Greco**, F. Gini, "Spectrum Sensing and Sharing for Cognitive Radars", *IET Radar, Sonar and Navigation*, Vol. 10, No 3, pp. 595–602, 2016
- [J62] S. Fortunati, F. Gini, **M. Greco**, "The Constrained Misspecified Cramér-Rao Bound", *IEEE Signal Processing Letters*, Vo. 23, No. 5, pp.718-721, February 2016
- [J63] S. Fortunati, F. Gini, **M. S. Greco**, "The Misspecified Cramér-Rao Bound and Its Application to Scatter Matrix Estimation in Complex Elliptically Symmetric Distributions," *IEEE Transactions on Signal Processing*, Vol. 64, No. 9, pp. 2387-2399, 2016, DOI: 10.1109/TSP.2016.2526961
- [J64] P. Stinco, M. Greco, F. Gini, B. Himed, "Cognitive Radars in Spectrally Dense Environments", *IEEE AESS Magazine*, Vol. 31, No. 10, pp. 20-27, October 2016, DOI: 10.1109/MAES.2016.150193.
- [J65] R. Palamà, **M. Greco**, F. Gini, " Multistatic Adaptive CFAR Detection in non-Gaussian clutter", *EURASIP Journal on Advances in Signal Processing*, October 2016.
- [J66] P. Stinco, **M. Greco**, F. Gini, B. Himed, "IEEE 802.22 Passive Coherent Location: Multistatic Detection and Velocity Profiler", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 52, No. 5, pp. 2298-2312, October 2016.
- [J67] S. Fortunati, F. Gini, **M. Greco**, "Matched, Mismatched and Robust Scatter Matrix Estimation and Hypothesis Testing in Complex t-Distributed Data", *EURASIP Journal on Advances in Signal Processing*, November 2016.
- [J68] K. Berbra, M. Barkat, F. Gini, **M. Greco**, P. Stinco, "A Fast Spectrum Sensing for CP-OFDM Cognitive Radio Based on Adaptive Thresholding", *Signal Processing*, Vol.128, pp. 252-261, November 2016
- [J69] H. Godrich, A. Nehorai, A. Tajer, **M. S. Greco**, and C. Zhang, "From the Guest Editors: Special Article Series on Signal Processing Education via Hands-On and Design Projects", *IEEE Signal processing Magazine*, pp. 13-15, January 2017.
- [J70] P. Stinco, **M. Greco**, F. Gini, B. Himed, "Cognitive Passive Tracking in Symbiotic IEEE 802.22 ComRadE Systems", *IEEE Transactions on Aerospace and Electronic Systems*, April 2017.

BOOKS

- [M1] S. Saponara, **M. Greco**, E. Ragonese, G. Palmisano, B. Neri, *Highly Integrated Low-Power Radars*, Artech House, London, June 2014.
- [M2] M. Greco, A. De Maio editoris, *Modern Radar Detection Theory*, ISBN: 978-1-61353-199-0, IET Scitech Publisher, December 2015.

BOOK CHAPTERS

- [B1] F. Gini, **M. Greco**, A. Farina, "Multiple target estimation in a surveillance radar system with a mechanically rotating antenna," Chap. 16 of *Advances in Direction of Arrival Estimation*, S. Chandran editor, Artech House, December 2005.
- [B2] **M. Greco**, F. Gini, "Sea clutter non-stationarity: the influence of long-waves", Chap. 5 of *Adaptive Radar Signal Processing*, S. Haykin editor, Wiley, New Jersey, 2007.

- [B3] **M. Greco**, P. Stinco, F. Gini, A. Farina, and M. Rangaswamy, " Optimal channel selection in a multistatic radar system " Chap. 9 of *Waveform Design and Diversity for Advanced Radar Systems*, F. Gini, A. De Maio, L. K. Patton editors, IET, Radar Sonar and Navigation Series 22, 2012.
- [B4] **M. Greco**, S. Watts, "Radar Clutter Modeling and Analysis", Chap. 11 of Vol. 2, 1st Edition of the Academic Press Library in Signal Processing, Communications and Radar Signal Processing, S. Theodoridis and R. Chellappa editors, Elsevier Ltd, pp. 513-594, October 2013.
- [B5] **M. Greco** " Radar for E-Health Applications: Signal Processing Perspective " chap. 4 in *Highly Integrated Low-Power Radars*, Artech House, London, June 2014.
- [B6] **M. Greco** "Radar for Automotive Application: Signal Processing Perspective", chap. 5 in *Highly Integrated Low-Power Radars*, Artech House, London, June 2014.
- [B7] K. J. Sangston, **M. S. Greco**, and F. Gini, "Compound-Gaussian Models and Target Detection: A Unified View", chapter 7 in *Modern Radar Detection Theory*, Maria S. Greco and Antonio De Maio Editors, ISBN: 978-1-61353-199-0, IET Scitech Publisher, December 2015.
- [B8] **M. Greco**, F. Gini, "The biosonar of the Mediterranean Bottlenose dolphins: analysis and modeling of echolocation signals", ch. 7 of *Biologically Inspired Radar and Sonar: Lessons from Nature*, IET Scitech Publisher, 2017.
- [B9] S. Fortunati, F. Gini, **M. Greco**, "Parametric Bounds Under Misspecified Models for Adaptive Radar Detection", Elsevier, 2017.

INTERNATIONAL CONFERENCES

- [C1] F. Gini, M. Greco, F. Lombardini, L. Verrazzani, "Distributed CFAR Detection in Weibull Clutter," *GRETSI Symposium on signal and Image Processing*, Juan-Les-Pins, France, September 1993.
- [C2] E. Dalle Mese, F. Gini, M. Greco, F. Lombardini, L. Verrazzani, "Decision Fusion in a High Resolution Multiradar Network," *NATO AC/243 Panel 3/4 Symposium on Multisensors and Sensor Data Fusion*, Brussels, Belgium, November 1993.
- [C3] A. Farina, F. Gini, M. Greco, P. Lombardo, "Coherent Radar Detection of Targets Against a Combination of K-Distributed and Gaussian Clutter," *IEEE International RADAR Conference*, Washington, U.S.A., May 1995, ISBN 0-7803-221 0-0.
- [C4] M. Greco, F. Gini, A. Farina, P. Lombardo, "Coherent Radar Detection of Signals with Unknown Parameters Against a Combination of K-Distributed and Gaussian Clutter," *GRETSI Symposium on signal and Image Processing*, Juan-Les-Pins, France, September 1995.
- [C5] A. Farina, F. Gini, M. Greco, K.J. Sangston, "Optimum and Sub-Optimum Coherent Radar Detection in Compound Gaussian Clutter: A Data-Dependent Threshold Interpretation," *IEEE National Radar Conference*, Ann Arbor, Michigan, U.S.A., May 1996, ISBN 0-7803-3147-8.
- [C6] A. Farina, F. Gini, M. Greco, L. Verrazzani, "Analysis of Sea Clutter Radar Data," *1996 CIE International Conference of Radar*, Beijing, China, October 1996, ISBN 7-5053-3903-6

- [C7] A. Farina, F. Gini, M. Greco, F. Lombardini, P. Lombardo, K.J. Sangston, L. Verrazzani, "Radar Detection of Targets: New Theoretical Findings and Results by Processing Recorded Live Data," (invited paper) *1996 CIE International Conference of Radar*, Beijing, China, October 1996, ISBN 7-5053-3903-6.
- [C8] F. Gini, M. Greco, "Variance Bounds for Parameter Estimation in Correlated Non-Gaussian Clutter", *1997 IEEE National Radar Conference*, Syracuse, NY, USA, May 1997, ISBN 0-7803-373 1-X.
- [C9] B. Billingsley, A. Farina, F. Gini, M. Greco, P. Lombardo, "Impact of experimentally measured Doppler spectrum of ground clutter cancellation on MTI and STAP", *1997 International Radar Conference*, Edinburgh, October 1997.
- [C10] F. Gini, M. Greco, K.J. Sangston, A. Farina "Coherent adaptive radar detection in non-Gaussian sea clutter", *31st Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, California, November 1997 (invited paper).
- [C11] F. Gini, A. Farina, and M. Greco, "Detection of Multidimensional Gaussian Random Signals in Compound-Gaussian Clutter plus Thermal Noise", *4th International Conference on Signal Processing (ICSP '98)*, October 1998, Beijing, China, pp.1650-3
- [C12] M. Greco, F. Gini, A. Farina, J.B. Billingsley, "Analysis of Clutter Cancellation in the Presence of Measured Radar Ground Clutter Data", *IEEE Radar 2000 Conference*, Washington DC, May 2000, pp. 422-427.
- [C13] F. Gini, M. Greco, "Texture Modeling and Validation Using Recorded High Resolution Sea Clutter Data," *2001 IEEE Radar Conference*, May 2001, Atlanta, GA.
- [C14] A. Farina, B. Wade, F. Gini, M. Greco, "Clutter Analysis with Cyclostationary Techniques," *Conf. On Multifunction radar and sonar sensor management techniques, the Radar, Sonar and Navigation systems professional network*, downloadable at <http://www.iee.org/Oncomms/pn/radar/mfr.cfm>, London, UK, 26th November 2001.
- [C15] A. Farina, F. Gini, M. Greco, "Multiple target DOA estimation by exploiting knowledge of the antenna main beam pattern", *2002 IEEE Radar Conference*, April 2002, Long Beach, CA, USA.
- [C16] F. Gini, M. Greco, A. Farina, M. Gubinelli, "Asymptotic maximum likelihood estimation of multiple radar targets," *IEEE Radar Conference 2003*, Huntsville, Alabama, USA, 5-8 May 2003, ISBN 0-7803-7920-9.
- [C17] M. Greco, F. Gini, A. Farina, "Multiple Target Detection and Estimation by Exploiting the Amplitude Modulation Induced by Antenna Scanning. Part I: Parameter Estimation," *IEEE ICASSP03 Conference*, Place, Hong Kong, 6-10 April, 2003, ISBN 0-7803-7663-3.
- [C18] F. Gini, F. Bordononi, M. Greco, A. Farina, "Multiple Target Detection and Estimation by Exploiting the Amplitude Modulation Induced by Antenna Scanning. Part II: Detection," *IEEE ICASSP03 Conference*, Place, Hong Kong, 6-10 April, 2003.
- [C19] F. Bordononi, F. Gini, M. Greco, L. Verrazzani, "Analysis of non-stationarity in high-range-resolution sea reflections", *2003 Tyrrhenian International Workshop on Remote Sensing*, Elba Island, Italy, September 15-18 2003.
- [C20] M. Greco, F. Gini, L. Verrazzani, "Analysis and Modeling of Acoustic Signals Emitted by Mediterranean Bottlenose Dolphins," *ISSPIT03*, December 2003, Darmstadt, Germany

- [C21] M. Greco, A. Farina, F. Gini, "A Multiple Hypotheses Testing Approach to Radar Detection and pre-Classification," *2004 IEEE Radar Conference*, May 2004, Philadelphia, USA.
- [C22] M. Greco, F. Gini, L. Verrazzani, D.D.Giusto, M. Murrioni, M. L.Lobina, "Analysis and modeling of echolocation signals emitted by Mediterranean Bottlenose Dolphins", *2004 EIM Conference*, July 2004, Corte, Corsica.
- [C23] D.D.Giusto, M. Murrioni, M. L. Lobina, M. Greco, F. Gini, L.Verrazzani, "Quality Evaluation in Cetacean Audio Samples", *2004 EIM Conference*, July 2004, Corte, Corsica.
- [C24] M. Greco, F. Gini, L. Verrazzani and A. Balleri, "Analysis of polarimetric marine scattering at different range resolutions", *IGARSS 2004 Conference*, September 2004, Anchorage, Alaska, USA.
- [C25] A. Farina, F.Gini, M. Greco, "Combined effect of phase and RGPO delay quantization on jamming signal spectrum", *2005 IEEE Radar Conference*, May 2005, Arlington, USA.
- [C26] M. Greco, F. Gini, S. Nuti, "Ultrasonic sonar clicks emitted by Mediterranean bottlenose dolphins: analysis and modeling," *NSIP05*, May 2005, Sapporo, Japan.
- [C27] F. Gini, M. Greco, "Statistical analysis of MSTAR data in different vegetation areas," *Third Annual Tri-Service Waveform Diversity Workshop*, March 2005, Huntsville, AL, USA.
- [C28] M. Greco, F. Gini, "Joint use of Σ and Δ Channels for Multiple Radar Target DOA Estimation," *EUSIPCO05*, September 2005, Antalya, Turkey.
- [C29] M. Greco, F. Gini, M. Rangaswamy, "Analysis of polarimetric lake clutter data at different range resolution," *2006 International Waveform Diversity & Design Conference*, January 2006, Hawaii, USA.
- [C30] M. Greco, F. Gini, M. Rangaswamy, "Non-stationarity Analysis of real X-band clutter data at different range resolutions," *2006 International Radar Conference*, April 2006, Verona, NY, USA, ISBN 978-0-7803-9496-4.
- [C31] M. Greco, F. Gini, "Statistical analysis of SAR data in different vegetated areas," *2006 IEEE International Conference on Acoustic, Speech, and Signal Processing, ICASSP06*, May 2006, Toulouse, France.
- [C32] M. Greco, F. Gini, A. Farina, "Detection and Classification of Jamming Signals," *EUSIPCO 2006*, September 2006, Firenze, Italy.
- [C33] Y. Norouzi, M. Greco, M.M. Nayebi, "Performance evaluation of k out of n detector," *EUSIPCO 2006*, September 2006, Firenze, Italy.
- [C34] A. Farina, F. Gini, M. Greco, V. Ravenni, L. Verrazzani, "Radar Detection of Deception Signals," *EDEFENCE 2006*, May 2006, Livorno, Italy.
- [C35] M.Greco, F. Gini, "Statistical Analysis of MSTAR Ground Data" (invited), *International Conference on Synthetic Aperture Sonar and Synthetic Aperture Radar*, September 2006, Lerici, Italy.
- [C36] Y. Norouzi, M.M Nayebi, M. Greco, "Asymptotically Optimal Rank Test Detection in Long Tailed Clutter", *CIE Radar Conference 2006 (CIE2006)*, October 2006, Shanghai, China, ISBN 0-7803-9582-4

- [C37] M. Greco, F. Gini, A. Farina, "Radar Detection and Classification of Jamming Signals Based on Cone Classes," *International Radar Conference 2007*, October 2007, Edinburgh, UK.
- [C38] M. Greco, F. Gini, "Cross-channel interference in cooperating multi-user radar systems," (invited), *ICEAA07*, September 2007, Turin, Italy
- [C39] M. Greco, F. Gini, A. Farina "Cross-channel interference in radar network," *CAMSAP07*, December 2007, Isole Vergini, USA
- [C40] M. Greco, F. Gini, A. Farina, L. Timmoneri "Radar target DOA estimation: Moving window vs AML estimator," *ICASSP08*, April 2008, Las Vegas, USA, ISBN 1053-587X.
- [C41] M. Greco, F. Gini, P. Stinco, A. Farina, L. Verrazzani, "Adaptive waveform diversity for cross-channel interference mitigation," *IEEE 2008 Radar Conference*, May 2008, Rome, Italy, ISBN 978-1-4244-1538-0.
- [C42] S. Maresca, M. Greco, F. Gini, L. Verrazzani, "Radar Tracking of a Move-Stop-Move Maneuvering Target in Clutter," *IEEE 2008 Radar Conference*, May 2008, Rome, Italy. (student paper finalist), ISBN 978-1-4244-1538-0 o ISBN 1-4244-1539-X ?
- [C43] M. Greco, F. Gini, A. Younsi, M. Rangaswamy, A. Zoubir, "Non-stationary sea clutter: Impact on disturbance matrix estimate and detector CFAR", *International Radar Conference 2008*, Adelaide, Australia, September 2008, ISBN 978-1-4244-2322-4.
- [C44] M. Greco, F. Gini, A. Farina, "Wind Farms Impact on Radar Systems", *ENC-GNSS 09*, Naples, May 2009.
- [C45] M. Greco, F. Gini, "Extraction and statistical analysis of sea clutter spikes", *IET and SEE seminar day on clutter*, Paris, France, June 2009.
- [C46] P. Fortunati, M. Greco, F. Gini, A. Farina, "Impact of flight disturbances on tracking airborne radar", *International Radar Symposium, IRS 2009*, Hamburg, Germany, September 2009.
- [C47] M. Greco, S. Maresca, F. Gini, R. Grasso, S. Coraluppi, "Statistical analysis of data measured by the HF surface wave radar WERA", *NATO Workshop on Data Fusion and Anomaly Detection for Maritime Situational Awareness - MSA2009*, La Spezia, Italy, September 2009.
- [C48] S. Maresca, M. Greco, F. Gini, L. Verrazzani, "Radar Tracking of a Maneuvering Ground Vehicle Using an Airborne Sensor", *International Radar Conference 2009*, Bordeaux, France, October 2009.
- [C49] P. Stinco, M. Greco, F. Gini, A. Farina, L. Timmoneri, "Analysis and comparison of two disambiguity algorithms: The modified CA and CRT", *International Radar Conference 2009*, Bordeaux, France, October 2009.
- [C50] M. Greco, P. Stinco, F. Gini, "Statistical analysis of sea clutter spikes", *EuRAD 2009*, Rome, Italy, October 2009, ISBN 978-2-87487-014-9.
- [C51] S. Maresca, M. Greco, F. Gini, L. Verrazzani, "Tracking of a Move-Stop-Move Target in Clutter: A Comparison among MM Methods", *EuRAD 2009*, Rome, Italy, October 2009.
- [C52] A. Farina, F. Gini, M. Greco, P. Stinco, "Optimal Selection of the TX-RX Pair in a Multistatic Radar System", *COGIS 09*, Paris, 16-18 November 2009.

- [C53] M. Greco, F. Gini, A. Farina, "Cramér-Rao Bounds for Bistatic Radars", *CAMSAP09*, Aruba, 13-16 December 2009, ISBN 978-1-4244-5180-7.
- [C54] P. Herselman, J. Cilliers, C. Baker, M. Greco, F. Gini, S. Watts, R. de Wind, "Evaluation and Performance Comparison of Detection Algorithms in a Maritime Environment", *IEEE International Radar Conference 2010*, Washington DC, USA, 10-14 May 2010, ISBN 978-1-4244-5812-7.
- [C55] S. Fortunati, F. Gini, M. Greco, A. Farina, A. Graziano, F. R. Castella, "Correction of Refracted Propagation Effects for Airborne Radar Tracking", *IEEE International Radar Conference 2010*, Washington DC, USA, 10-14 May 2010, ISBN 978-1-4244-5812-7.
- [C56] S. Maresca, M. Greco, F. Gini, R. Grasso, S. Coraluppi, Nicolas Thomas, "The HF Surface Wave Radar WERA. Part I: Statistical Analysis of Recorded Data", *IEEE International Radar Conference 2010*, Washington DC, USA, 10-14 May 2010, ISBN 978-1-4244-5812-7.
- [C57] S. Maresca, M. Greco, F. Gini, R. Grasso, S. Coraluppi, Nicolas Thomas, "The HF Surface Wave Radar WERA. Part II: Spectral Analysis of Recorded Data", *IEEE International Radar Conference 2010*, Washington DC, USA, 10-14 May 2010, ISBN 978-1-4244-5812-7.
- [C58] K.J. Sangston, F. Gini, M. Greco, "New Results on Coherent Radar Target Detection in Heavy-Tailed Compound-Gaussian Clutter", *IEEE International Radar Conference 2010*, Washington DC, USA, 10-14 May 2010, ISBN 978-1-4244-5812-7.
- [C59] M. Greco, P. Stinco, F. Gini, A. Farina, M. Rangaswamy, "Cramér-Rao Bounds and TX-RX Selection in a Multistatic Radar Scenario (invited)", *IEEE International Radar Conference 2010*, Washington DC, USA, 10-14 May 2010.
- [C60] K.J. Sangston, F. Gini, M. Greco, "Coherent Target Detection in Heavy-Tailed Compound-Gaussian Clutter: Survey and New Results", *14th Gravitational Wave Data Analysis Workshop*, Rome, Italy, January 26-29 2010.
- [C61] P. Stinco, M. Greco, F. Gini, L. Verrazzani "Optimal Sensor Selection In A Multistatic Passive Radar Scenario", *IEEE GOLD 2010*, Livorno, Italy, 29-30, April 2010.
- [C62] S. Fortunati, F. Gini, M. Greco, A. Farina, A. Graziano, S. Giompapa, F. R. Castella, L. Verrazzani, "Refracted Propagation Distortion and Its Corrections for Airborne Radar", *IEEE GOLD 2010*, Livorno, Italy, 29-30, April 2010.
- [C63] S. Maresca, M. Greco, F. Gini, L. Verrazzani, R. Grasso, S. Coraluppi, J. Horstmann, "Integration of HFSW Radar and AIS Data: Ship Detection and Classification," *IEEE GOLD 2010*, Livorno, Italy, 29-30, April 2010.
- [C64] S. Maresca, M. Greco, F. Gini, R. Grasso, S. Coraluppi, J. Horstmann, "Vessel Detection and Classification: An Integrated Maritime Surveillance System in the Tyrrhenian Sea", *CIP 2010*, Elba Island, Italy, June 14-16 2010.
- [C65] P. Stinco, M. Greco, F. Gini, L. Verrazzani "Optimal Sensor Selection In Multistatic Passive Coherent Location System", *Annual Meeting GTTI 2010*, June 21-23 2010 Brescia, Italy.
- [C66] S. Fortunati, F. Gini, M. Greco, A. Farina, A. Graziano, "Cramér-Rao Type Lower Bounds for Relative Sensor Registration Process", *EUSIPCO 2010*, Aalborg, Denmark, August 2010.
- [C67] P. Stinco, M. Greco, F. Gini, "Data Fusion in a Multistatic Radar System (invited)", *2010 International Conference on Synthetic Aperture Sonar and Synthetic Aperture Radar*, 13-14 September, Lerici, Italy.

- [C68] P. Stinco, M. Greco, F. Gini, A. Farina, "Posterior Cramér-Rao Lower Bounds for Bistatic Radar Systems", *ICASSP 2011*, 22-27 May 2011, Prague, Czech Republic.
- [C69] P. Stinco, M. Greco, F. Gini and A. Farina, "Bistatic PCRLB for Random Manouvering Target", *GTTI Annual Meeting*, 20-22 June 2011, Taormina , Italy
- [C70] P. Stinco, M. Greco, F. Gini, "Adaptive Detection in Compound-Gaussian Clutter with Inverse-Gamma Texture", *2011 International Radar Conference (CIE2011)*, 24-27 October 2011, Chengdu, China.
- [C71] P. Stinco, M. Greco, F. Gini, M. La Manna "NCTR in Netted Radar Systems", 4th International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, *CAMSAP 2011*, December 2011, Puerto Rico, ISBN 978-1-4577-2103-8
- [C72] A. Di Giovanni, S. W. Asmar, R. Simpson and M. Greco, "Tool for Planetary Surface Scattering Geometry with Orbiting Spacecraft", *EPSC-DPS 2011 Meeting*, 3-7 October 2011, Nantes, France
- [C73] S. Fortunati, F. Gini, M. Greco, A. Farina, A. Graziano, S. Giompapa "On the Application of the Expectation-Maximization Algorithm to the Relative Grid-Locking Problem ", *ISSPIT2011*, 14-17 December 2011, Bilbao, Spain, ISBN 978-1-4673-0753-6
- [C74] P. Stinco, M. Greco, F. Gini, M. Lamanna, "Multistatic Target Recognition in Real Operational Scenarios", *2012 IEEE Radar Conference*, May 2012, Atlanta, GA, USA, ISBN 978-1-4673-0658-4
- [C75] S. Fortunati, F. Gini, M. Greco, A. Farina, A. Graziano, S. Giompapa "An Expectation-Maximization-Based Approach to the Relative Sensor Registration for Multi-Target Scenario", *2012 IEEE Radar Conference*, May 2012, Atlanta, GA, USA, ISBN 978-1-4673-0658-4.
- [C76] D.W.O'Hagan, A. Capria, D. Petri, V. Kubica, M. Greco, F. Berizzi, A.G.Stove "Passive Bistatic Radar (PRB) for harbour protection applications", *2012 IEEE Radar Conference*, May 2012, Atlanta, GA, USA, ISBN 978-1-4673-0658-4.
- [C77] P. Stinco, M. Greco, F. Gini and A. Farina "Cramer-Rao Bounds and Their Application to Sensor Selection", *2012 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, March 25-30, 2012, Kyoto, Japan.
- [C78] G.Bacci, L.Sanguinetti, M.Greco, M.Luise "A Game-Theoretic Approach for Energy-Efficient Detection in Radar Sensor Networks", *SAM2012*, June 17-20 2012, Hoboken, NJ, USA
- [C79] S. Fortunati, F. Gini, M. Greco, A. Farina, A. Graziano, S. Giompapa, "An identifiability criterion in the presence of random nuisance parameters", *EUSIPCO 2012*, Bucharest, Romania, 27-31 August 2012.
- [C80] P. Stinco, M. Greco, F. Gini, A. Farina, "Sensor Selection in PCL Radar Systems Based on Bistatic PCRLB", *2012 Tyrrhenian Workshop on Advances in Radar and Remote Sensing*, Naples, 2012.
- [C81] S. Fortunati, F. Gini, M. Greco, A. Farina, A. Graziano, "Least Squares Estimation and Hybrid Cramér-Rao Lower Bound for Absolute Sensor Registration", *2012 Tyrrhenian Workshop on Advances in Radar and Remote Sensing*, Naples, 2012.

- [C82] M. La Manna, P. Stinco, M. Greco, F. Gini, "Design of a Cognitive Radar for Operation in Spectrally Dense Environments", *IEEE 2013 Radar Conference*, 29 April-3 May, 2013 Ottawa, Ontario, Canada.
- [C83] M. La Manna, P. Stinco, M. Greco, F. Gini, "Cognitive Techniques for a Wideband Phased Array Radar", *2013 IEEE International Symposium on Phased Array Systems and Technology (ARRAY 2013)*, 15-18 Oct. 2013, Waltham, MA, USA.
- [C84] M. Greco, F. Gini, A. Wiesel, "ML Estimate and CRLB of Covariance Matrix for Complex Elliptically Symmetric Distribution", *EUSIPCO2013*, Marrakech, September 2013.
- [C85] R. Palamà, M. Greco, P. Stinco, F. Gini, "Statistical Analysis of NetRad High Resolution Sea Clutter", *EUSIPCO2013*, Marrakech, September 2013.
- [C86] S. Fortunati, R. Grasso, F. Gini, M. S. Greco, "Oceanographic Data Transmission: a Compressed Sensing-based Approach", *2nd International Workshop on Compressed Sensing Applied to Radar (CoSeRa 2013)*, 17-19 September 2013, Bonn, Germany.
- [C87] P. Stinco, M. Greco, F. Gini, M. La Manna, "Compressed Spectrum Sensing in Cognitive Radar Systems", *2014 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP2014)*, May 2014, Florence, Italy
- [C88] S. Fortunati, R. Grasso, F. Gini, M. Greco, "Single Snapshot DOA Estimation Using Compressed Sensing", *2014 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP2014)*, May 2014, Florence, Italy.
- [C89] M. Greco, S. Fortunati, F. Gini, "Naive, Robust or Fully-Adaptive: An Estimation Problem for CES Distributions", *The 8th IEEE Sensor Array and Multichannel Signal Processing Workshop, SAM2014*, June 2014, A Coruna, Spain.
- [C90] P. Stinco, M. Greco, F. Gini, B. Himed, "Channel Parameters Estimation for Cognitive Radar Systems", *4th International Workshop on Cognitive Information Processing - CIP 2014*, May 26-28 2014, Copenhagen, Denmark.
- [C91] S. Fortunati, R. Grasso, F. Gini, M. S. Greco, K. LePage, "Single Snapshot DOA Estimation by Using Compressed Sensing", *NATO SET-213 Specialist Meeting on "COMPRESSIVE SENSING FOR RADAR/SAR AND EO/IR IMAGING*, Tallin, Estonia, 12-13 May 2014.
- [C92] R. Palamà, M. Greco, P. Stinco, F. Gini, "Analysis of Sea Spikes in NetRad Clutter", *European Radar Conference 2014, EuRad 2014*, Rome, October 2014.
- [C93] S. Fortunati, R. Grasso, F. Gini, M. Greco, K. LePage, "Three CS-based beamformers for single snapshot DOA estimation", *EUSIPCO 2014*, Lisbon, Portugal, 1-5 September 2014.
- [C94] E. Giusti, A. Bacci, P. Stinco, M. Martorella, A.L. Saverino, F. Gini, F. Berizzi, M. Greco, "Cognitive Synthetic Aperture Radar", *SET-204 Specialist Meeting on "Waveform Diversity"*, Berlin, 2014.
- [C95] S. Fortunati, M.S. Greco, F. Gini, "A Lower Bound for the Mismatched Maximum Likelihood Estimator", *IEEE International Radar Conference 2015*, May 11-15, 2015, Arlington, USA.
- [C96] K.J. Sangston, F. Gini, M. Greco, "Adaptive Detection of Radar Targets in Compound-Gaussian Clutter", *2015 IEEE International Radar Conference*, Arlington, VA, USA, 11-15 May 2015.

- [C97] P. Stinco, M. Greco, F. Gini, "White Space Passive Coherent Location System based on IEEE 802.22", *International Radar Symposium 2015 (IRS 2015)*, Dresden, Germany, 24-26 June 2015.
- [C98] R. Grasso, P. Braca, S. Fortunati, F. Gini, M. Greco, "Distributed Underwater Glider Network with Consensus Kalman Filter for Environmental Field Estimation", *OCEANS 2015*, Genova, Italy, 18-21 May 2015.
- [C99] R. Grasso, P. Braca, S. Fortunati, F. Gini, M. S. Greco, "Dynamic Underwater Sensor Network for Sparse Field Estimation", *CoSeRa 2015*, Pisa, Italy, June 2015.
- [C100] R. Grasso, P. Braca, S. Fortunati, F. Gini, M. S. Greco, "Environmental Field Estimation by Consensus Based Dynamic Sensor Networks and Underwater Gliders," *EUSIPCO 2015*, Nice, France, 31 August - 4 September, 2015.
- [C101] P. Stinco, M. Greco, F. Gini, B. Himed, "Velocity Profiler in IEEE 802.22 Based PCL System", *CAMSAP2015*, Cancun, Mexico, December 2015
- [C102] E. Giusti, A. Bacci, P. Stinco, M. Martorella, A.L. Saverino, F. Gini, F. Berizzi, M. Greco, "Cognitive Multichannel ISAR Imaging for Maritime Coastal Surveillance and Ground Border Control" *CAMSAP2015*, Cancun, Mexico, December 2015
- [C103] R. Couillet, M. Greco, J.P. Overlez, F. Pascal, "RMT for Whitening Space Correlation and Applications to Radar Detection", *CAMSAP2015*, Cancun, Mexico, December 2015.
- [C104] R. Palamà, M. Greco, F. Gini, "Multistatic CFAR Detection in Non-Gaussian Clutter", *2016 IEEE Radar Conference*, Philadelphia, USA, May 2016.
- [C105] R. Palamà, F. Fioranelli, M. Ritchie, H. Griffiths, M. Greco, F. Gini, "Copolar Calibration of Multistatic Radar in the Presence of Multipath", *2016 IEEE Radar Conference*, Philadelphia, USA, May 2016.
- [C106] S. Fortunati, M. Greco, F. Gini, "The Impact of Unknown Extra Parameters on Scatter Matrix Estimation and Detection Performance in Complex t-Distributed Data", *SSP 2016*, Palma de Mallorca, July 2016
- [C107] S. Fortunati, F. Gini, M. S. Greco, "On Scatter Matrix Estimation in the Presence of Unknown Extra Parameters: Mismatched Scenario" *EUSIPCO 2016*, Budapest, August 2016.
- [C108] P. Stinco, M. Greco, F. Gini, B. Himed, "Cognitive Tracking in IEEE 802.22 Symbiotic Radars", *EUSIPCO 2016*, Budapest, August 2016.
- [C109] M. Greco, F. Gini, P. Stinco, "Cognitive Radars: Some Application," invited speech, *GlobalSIP 2016*, Washington DC, December 2016.

NATIONAL CONFERENCES

- [NC1] S. Fortunati, A. Graziano, F. Gini, A. Farina, M. S. Greco, "Algoritmi di Registrazione per Sistemi Radar Multisensore", *Workshop Radar AMI*, 28 October 2015, Borgopiave, Latina.

TEACHING PUBLICATIONS

- [D1] F. Giannetti, M. Greco, L. Verrazzani, "Appunti di Comunicazioni Elettriche (in Italian)", ETS, July 2000.

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Marie S. Greco