

Plenary Session

Monday, September 15th, 14:30 – 18:15
Aula Magna, Palazzo Bo

Chairman: Prof. Paolo Lampariello, Università di Roma "La Sapienza"

14:30 Welcome and opening remarks

15:00 *Microwave and Photonic Metamaterials – The DTU Perspective*,
Prof. Anders Overgaard Bjarklev, President the Technical University of
Denmark [PL.1]

16:00 Coffee break

16:30 *Graphene and related Two-Dimensional Materials: a Toolkit for Future
Electronics Applications?*, Prof. Max Lemme, University of Siegen,
Graphene-based Nanotechnology, Germany [PL.2]

17:30 *Tops, vortices, and fields. Maxwell and the use of analogies and metaphors in
science*, Prof. Giulio Peruzzi, Università di Padova e Accademia Galileiana di
Scienze Lettere e Arti [PL.3]

Session 1: EMF for energy and environment applications

Wednesday, September 17th, 9:30 – 11:15
Sala A, Centro Congressi "A. Luciani"

Chairman: Alessandro Toscano, Università di Roma Tre

- 9:30** *Power waves and conjugate image impedance matching for wireless power transfer links*, Dionigi M., Mongiardo M. [S1.1]
- 9:45** *Electromagnetic field level control in built-up areas*, Franceschetti G., Iodice A., Riccio D., Ruello G. [S1.2]
- 10:00** *Circularly polarized robust antennas for wireless monitoring of concrete structures*, Castorina G., Mauro G.S., Morabito A.F., Di Donato L., Sorbello G. [S1.3]
- 10:15** *Surface And Air Heat Island Of Milan: Spatial And Temporal Analysis From MODIS*, Anniballe R., Bonafoni S., Pierdicca N. [S1.4]
- 10:30** *Microwave treatment of agricultural soil samples. Evaluation of effects on soil quality and seed germinability. Preliminary results*, Cicatelli A., Castiglione S., Di Luca A., Esposito D., Bisceglia B. [S1.5]
- 10:45** *Hierarchical in silico validation procedure for biomass estimation techniques based on dielectric spectroscopy*, Muzi M., Mangini F., Stoja E. [S1.6]
- 11:00** *SIEM incontra COMSOL* [S1.7]

Session 2: Optical fibers

Wednesday, September 17th, 9:30 – 11:00
Sala B, Centro Congressi "A. Luciani"

Chairman: Stefano Selleri, Università di Parma

- 9:30** *DNA biosensors implemented on functionalized microstructured optical fibers Bragg gratings*, Candiani A., Cucinotta A., Selleri S. [S2.1]
- 9:45** *High power fiber lasers for additive manufacturing applications*, Braglia A., Liu Y., Perrone G. [S2.2]
- 10:00** *Photonic crystal fibers with reduced symmetry for high power lasers*, Coscelli E., Molardi C., Poli F., Cucinotta A., Selleri S. [S2.3]
- 10:15** *Confinement loss scaling law analysis in tube lattice fibers*, Masruri M., Vincetti L., Cucinotta A., Selleri S. [S2.4]
- 10:30** *Modal analysis of holey fiber mode-selective couplers*, Parini A., Riesen N., Argyros A., Lwin R., Leon-Saval S.G., Love J.D., Bellanca G., Bassi P. [S2.5]
- 10:45** *Coupling mechanism in multimode fibers*, Palmieri L., Santagiustina M., Galtarossa A. [S2.6]

Session 3: Microwaves and RFID

Wednesday, September 17th, 14:30 – 16:30
Sala A, Centro Congressi "A. Luciani"

Chairman: Riccardo Tascone, CNR-IEIIT, Torino

- 14:30** *Analysis of lossy waveguide components by the BI-RME method combined with a perturbation technique*, Giannini A., Bozzi M., Bressan M., Pasian M., Perregrini L. [S3.1]
- 14:45** *Design of a W band correlation unit*, Addamo G., Peverini O.A., Virone G., Tascone R., Lumia M., Orta R. [S3.2]
- 15:00** *Wearable textile microwave components in substrate integrated waveguide technology*, Moro R., Agneessens S., Rogier H., Bozzi M. [S3.3]
- 15:15** *Wearable auto-tuning antenna for COSPAS-SARSAT rescue applications*, Baroni A., Nepa P. [S3.4]
- 15:30** *Near-field modular antenna for UHF RFID desktop reader applications*, Caso R., Michel A., Buffi A. [S3.5]
- 15:45** *A novel antenna for UHF RFID*, Casula G.A. [S3.6]
- 16:00** *Manufacture and test of an innovative configuration of printed UWB antenna*, Mazzocchi S., Galli A., Sassaroli D., Zucca M. [S3.7]
- 16:15** *SIEM incontra ANRITSU* [S3.8]

Session 4: Integrated and nonlinear optics

Wednesday, September 17th, 14:30 – 16:30
Sala B, Centro Congressi "A. Luciani"

Chairman: Paolo Bassi, Università di Bologna

- 14:30** *The outcomes of sapphire, a generic foundry platform for silicon photonics*, Morichetti F., Annoni A., Grillanda S., Orlandi P., Malaguti S., Parini A., Strain M.J., Sorel M., Bellanca G., Bassi P., Melloni A. [S4.1]
- 14:45** *Non-invasive light detection on a silicon photonic chip*, Morichetti F., Grillanda S., Carminati M., Ferrari G., Sampietro M., Melloni A. [S4.2]
- 15:00** *Exploitation of whispering gallery mode resonances for characterization of rare-earth doped glass devices*, Palma G., De Palma L., Yano T., Nazabal V., Kishi T., Moréac A., Ferrari M., Prudenzano F. [S4.3]
- 15:15** *Mesoscopic photonic crystals based stable planar cavities*, Magno G., Monmayrant A., Grande M., Lozes-Dupuy F., Gauthier-Lafaye O., Calò G., Petruzzelli V. [S4.4]
- 15:30** *Radiating shock waves in passive optical resonators*, Malaguti S., Conforti M., Bellanca G., Trillo S. [S4.5]
- 15:45** *Collision enhanced dispersive wave generation*, Tonello A., Modotto D., Krupa K., Labruyère A., Shalaby B.M., Couderc V., Barthélémy A., Minoni U., Wabnitz S., Aceves A.B. [S4.6]
- 16:00** *Extreme waves in nonlinear optics and oceanography*, Baronio F., Conforti M., Degasperis A., Onorato M., Wabnitz S. [S4.7]
- 16:15** *Backward second-harmonic generation of near infrared picosecond pulses*, Busacca A.C., Stivala S., Cino A.C., Curcio L., Tomasino A., Assanto G. [S4.8]

Session 5: Antennas

Wednesday, September 17th, 17:00 – 19:00
Sala A, Centro Congressi "A. Luciani"

Chairman: Giuseppe Mazarella, Università di Cagliari

- 17:00** *New tools for analysis and synthesis of real antenna devices*, Rocca P. [S5.1]
- 17:15** *Fabry-Perot antenna with improved bandwidth*, Di Massa G., Moreno H.O., Costanzo S. [S5.2]
- 17:30** *Substrate Integrated Waveguide (SIW) cavity-backed patch antenna*, Losito O., Castellano T., Chiapperino M., Bozzetti M., Venanzoni G., Angeloni G., Renghini C., Carta P., Mencarelli D., Farina M., Morini A., Prudenzano F. [S5.3]
- 17:45** *Laboratory tests assessing a nonredundant NF-FF transformation technique with plane-polar scanning*, D'Agostino F., Ferrara F., Gennarelli C., Guerriero R., Migliozzi M. [S5.4]
- 18:00** *Compressed sensing/sparse recovery approach for array diagnosis using undersampled near-field data*, Costanzo S., Migliore M. D., Borgia A., Pinchera D., Di Massa G. [S5.5]
- 18:15** *Design of a planar sub-array for smart antenna applications*, Di Filippo M., Lucci L., Pelosi G., Selleri S. [S5.6]
- 18:30** *Reconfigurable concentric circular arrays: a novel hybrid synthesis method*, Bucci O.M., Perna S., Pinchera D. [S5.7]
- 18:45** *Strategies for scattering reduction of antenna arrays*, Genovesi S., Costa F., Monorchio A., Manara G. [S5.8]

Session 6: EMF propagation

Wednesday, September 17th, 17:00 – 19:00
Sala B, Centro Congressi "A. Luciani"

Chairman: Piero Tognolatti, Università dell'Aquila

- 17:00** *Radiofrequency power coupled to high-density plasmas for driving current in thermonuclear reactors*, Amicucci L., Cardinali A., Castaldo C., Cesario R., Galli A., Napoli F., Schettini G., Tuccillo A.A. [S6.1]
- 17:15** *A novel Bessel beam launcher based on higher-order leaky modes*, Fuscaldo W., Valerio G., Galli A., Sauleau R., Ettore M. [S6.2]
- 17:30** *Wigner function approach for the radiation of complex electromagnetic sources*, Gradoni G. [S6.3]
- 17:45** *Electromagnetic scattering by a dielectric sphere embedded in a circular cylinder*, Mangini F., Tedeschi N. [S6.4]
- 18:00** *Plane-wave scattering by a perfectly conducting elliptic cylinder near a plane surface*, Santini C., Mangini F., Tedeschi N. [S6.5]
- 18:15** *On the scattering by a cylindrical target below a rough gaussian surface*, Ponti C. [S6.6]
- 18:30** *Electromagnetic backscattering models for a couple of buildings*, Ciotola A., Di Martino G., Iodice A., Riccio D., Ruello G. [S6.7]
- 18:45** *Study of the multipath distribution in urban environment for 5G mobile radio*, Barbiroli M., Degli-Esposti V., Falciassecca G., Fuschini F., Tian L., Vitucci E.M. [S6.8]

Session 7: Metamaterials

In memory of prof. Giorgio Gerosa

Thursday, September 18th, 9:00 – 11:00
Sala A, Centro Congressi "A. Luciani"

Chairman: Paolo Lampariello, Università di Roma "La Sapienza"

- 9:00** *A hybrid algorithm for overcoming the branch ambiguity problem in the retrieval of the equivalent parameters of a double negative metamaterial*, Sgrò A., De Carlo D., Angiulli G. [S7.1]
- 9:15** *On the applications of a particular electric-magnetic uniaxial lossy medium*, Khalid M. [S7.2]
- 9:30** *Metamaterial-based electromagnetic wave absorber*, La Spada L., Vegni L. [S7.3]
- 9:45** *Tunable triangular metamaterial resonator based on MEMS cantilever in CPW configuration*, Proietti E., Lucibello A., Sardi G.M., Marcelli R., Bartolucci G. [S7.4]
- 10:00** *Use of metamaterials to improve electrical and radiating performances of horn antennas*, Barbuto M., Bilotti F., Monti A., Ramaccia D., Toscano A. [S7.5]
- 10:15** *Epsilon-near-zero based antennas*, La Spada L., Vegni L. [S7.6]
- 10:30** *Radiation from vertical dipoles in the presence of homogenized omnidirectional metasurfaces*, Di Ruscio D., Burghignoli P., Baccarelli P., Galli A. [S7.7]
- 10:45** *Chipless RFID with metasurfaces*, Costa F., Genovesi S., Monorchio A., Manara G. [S7.8]

Session 8: Numerical methods

Thursday, September 18th, 9:00 – 11:00
Sala B, Centro Congressi "A. Luciani"

Chairman: Luca Perregrini, Università di Pavia

- 9:00** *Beam coupling impedance simulation and RF measurements of a passive extraction septum for particle absorbing in the CERN proton synchrotron,* Persichelli S., Migliorati M. [S8.1]
- 9:15** *Modeling the electromagnetic field in anisotropic inhomogeneous magnetized plasma of ECR ion sources,* Torrisi G., Mascali D., Neri L., Sorbello G., Celona L., Castro G., Di Donato L., Isernia T., Gammino S. [S8.2]
- 9:30** *Source stirring analysis for reverberation chambers,* Cerri G., De Leo A., Mariani Primiani V., Russo P. [S8.3]
- 9:45** *On the numerical calculation of integrals occurring in the scattering by circular objects,* Di Murro F., Lucido M., Schettino F. [S8.4]
- 10:00** *A mortar-element method for the analysis of cylindrical guiding structures,* Tibaldi A., Addamo G. [S8.5]
- 10:15** *A new approach the analysis of sectorial elliptic waveguides,* Fanti A., Mazzarella G. [S8.6]
- 10:30** *Assessment of the performances of GMRES(R) using a domain decomposition approach as a preconditioner,* Ntibarikure L., Pelosi G., Selleri S. [S8.7]
- 10:45** *SIEM incontra ANSYS* [S8.8]

Session 9: Nanomaterials

Thursday, September 18th, 11:30 – 13:00
Sala A, Centro Congressi "A. Luciani"

Chairman: Costantino De Angelis, Università di Brescia

- 11:30** *Graphene-assisted amplitude and phase modulation in silicon photonics*, Midrio M., Galli P., Romagnoli M., Kimerling L.C., Michel J. [S9.1]
- 11:45** *Novel FD-BPM formulation for the analysis of graphene-assisted optical devices*, Capobianco A.D., Locatelli A., De Angelis C., Boscolo S., Midrio M. [S9.2]
- 12:00** *Graphene-based one-dimensional grating for enhanced absorbers*, Grande M., Vincenti M.A., Stomeo T., Bianco G.V., De Ceglia D., Magno G., Petruzzelli V., Bruno G., De Vittorio M., Scalora M., D’Orazio A. [S9.3]
- 12:15** *Nonlocal graphene conductivity models and dispersion analysis of graphene nanostrip lines*, Lovat G., Hanson G.W., Araneo R., Burghignoli P. [S9.4]
- 12:30** *Material-by-design for advanced electromagnetic devices*, Oliveri G. [S9.5]
- 12:45** *Characterization of nanocomposites based on MWCNTs for radar absorbing applications*, Miscuglio M., Hajj Yahya M., Savi P., Giorcelli M., Tagliaferro A. [S9.6]

Session 10: Remote sensing

Thursday, September 18th, 11:30 – 13:00
Sala B, Centro Congressi "A. Luciani"

Chairman: Daniele Riccio, Università di Napoli "Federico II"

- 11:30** *GNSS-R signal strength sensitivity to soil moisture*, Notarpietro R., Pei Y., Savi P. [S10.1]
- 11:45** *Remote retuning of X-band mini weather radar using ground clutter echoes*, Bertoldo S., Lucianaz C., Rorato O., Allegretti M., Perona G. [S10.2]
- 12:00** *Modeling the polarimetric response to atmospheric precipitation on synthetic aperture radar imagery over ocean*, Polverari F., Mori S., Pulvirenti L., Pierdicca N., Marzano F.S. [S10.3]
- 12:15** *Electromagnetic-based approach for RGB representation of SAR multitemporal data*, Amitrano D., Di Martino G., Iodice A., Riccio D., Ruello G. [S10.4]
- 12:30** *Electromagnetic model for SAR shape from shading*, Di Martino G., Di Simone A., Iodice A., Riccio D., Ruello G. [S10.5]
- 12:45** *TELAER: an italian interferometric airborne SAR system*, Perna S., Berardino P., Esposito C., Fornaro G., Gifuni A., Jackson G., Pauciullo A., Lanari R. [S10.6]

Session 11: Bioelectromagnetism and biomedical applications

Thursday, September 18th, 14:30 – 16:00
Sala A, Centro Congressi "A. Luciani"

Chairman: Guglielmo D'Inzeo, Università di Roma "La Sapienza"

- 14:30** *A comparison of simple models to evaluate dielectric properties of human tissues at 2.45 GHz from water content*, Cavagnaro M., Frezza F., Laurita R., Tannino M. [S11.1]
- 14:45** *Monitoring of tissue shrinkage during a microwave thermal ablation procedure*, Farina L., Weiss N., Nissenbaum Y., Cavagnaro M., Lopresto V., Pinto R., Tosoratti N., Amabile C., Cassarino S., Goldberg S.N. [S11.2]
- 15:00** *Contrast aided blind focusing of the electromagnetic field for microwave hyperthermia*, Bellizzi G., Bucci O.M. [S11.3]
- 15:15** *Exploiting compressive sensing in MNP enhanced MWI for breast cancer imaging*, Bevacqua M., Scapaticci R. [S11.4]
- 15:30** *A mm-wave 2D ultra-wideband radar for breast tumour imaging*, Moscato S., Matrone G., Pasian M., Mazzanti A., Bozzi M., Perregrini L., Svelto F., Magenes G., Arcioni P., Summers P. [S11.5]
- 15:45** *Nanoscale imaging through optical fiber extrinsic micro-cavity scanning microscopy*, Di Donato A., Pietrangelo T., Mencarelli D., Farina M. [S11.6]

Session 12: Inverse scattering problems

Thursday, September 18th, 14:30 – 16:00
Sala B, Centro Congressi "A. Luciani"

Chairman: Tommaso Isernia, Università Mediterranea di Reggio Calabria

- 14:30** *Localization of shallow buried objects by far field sparse data*, Brancaccio A., Leone G., Solimene R. [S12.1]
- 14:45** *A numerical microwave tomographic algorithm to improve reconstruction of buried objects*, Comite D., Galli A., Catapano I., Soldovieri F. [S12.2]
- 15:00** *Observing scattered fields in view and frequency diversities*, Maisto M.A., Solimene R., Pierri R. [S12.3]
- 15:15** *Synthetic experiments and field conditioning as an effective approach to inverse scattering*, Bevacqua M., Di Donato L., Crocco L., Isernia T. [S12.4]
- 15:30** *Direct and inverse scattering of axially moving multilayer elliptic cylinders*, Pastorino M., Raffetto M., Randazzo A. [S12.5]
- 15:45** *Innovative passive techniques for crowd opportunistic wireless localization*, Viani F. [S12.6]

Poster Session

Wednesday, September 17th, 11:00 – 13:00
Centro Congressi "A. Luciani"

Chairman: Antonio-D. Capobianco, Marco Santagiustina, Luca Palmieri, Università di Padova

- P.01** *The italian contribution to the low frequency aperture array of the square kilometer array*, Bolli P., Bianchi G., Lingua A., Monari J., Murgia M., Perini F., Pupillo G., Schillirò F., Tartarini G., Virone G.
- P.02** *Research activities on UHF RFID systems at the University of Pisa - Research Unit*, Buffi A., Michel A., Caso R., D'Alessandro A., Baroni A., Nepa P.
- P.03** *A simple and effective algorithm for the power synthesis of reconfigurable arrays with near-field nulls*, Buttazzoni G., Vescovo R.
- P.04** *A printed LPDA fed by a coplanar waveguide for wideband applications*, Casula G.A., Montisci G., Mazzarella G., Maxia P.
- P.05** *Miniaturized fractal-shaped reflect arrays for wide-angle fixed-beam applications*, Costanzo S., Venneri F.
- P.06** *Positioning errors compensation in a nonredundant spherical NF-FF transformation: experimental evidences*, D'Agostino F., Ferrara F., Gennarelli C., Guerriero R., Migliozi M.
- P.07** *A microwave displacement sensor system exploiting electromagnetic interferometry*, Costanzo A., Fantuzzi M., Masotti D., Rizzoli V.
- P.08** *A numerical method to account for digitally-modulated carriers in time-modulated antenna arrays*, Masotti D., Francia P., Mastri F., Costanzo A., Rizzoli V.
- P.09** *Antenna synthesis and analysis @ ELEDIA research center*, Donelli M., Anselmi N., Bekele E., Carlin M., Manica L., Oliveri G., Poli L., Rocca P., Salucci M., Tenuti L., Zambiasi L., Massa A.
- P.10** *Experimental generation and measurement of orbital angular momentum radio waves*, Spinello F., Mari E., Parisi G., Tamburini F., Romanato F., Someda C.G.
- P.11** *SiGe BiCMOS technology for Ka-band SatCom on the move user terminals*, Boccia L., Shamsafar A., Arnieri E., Sandhu A.I., Amendola G., Purtova T., Tarabani F., Valenta V., Schumacher H., Meniconi E., Kaynak M., Tillack B., Luo Q., Gao S., Ziegler V.
- P.12** *Measurement and simulation of stirring effects of field probes in a reverberation chamber*, Bastianelli L., Mariani Primiani V., Moglie F.

- P.13** *Radiation losses in substrate integrated waveguides: a formula for a quantitative determination*, Pasian M., Bozzi M., Perregrini L.
- P.14** *Radar activity at University of Calabria*, Costanzo S., Di Massa G., Spadafora F., Raffo A., Borgia A., Costanzo A., Morrone L.
- P.15** *Innovative wireless solutions for smart cities*, Giarola E., Marchesi S., Polo A., Robol F., Viani F., Zappini L., Zorer A., Massa A.
- P.16** *Design of magnetic-resonant wireless power transfer Links realized with class E amplifiers*, Dionigi M., Leuzzi G., Lombardi F.M., Mongiardo M., Stornelli V.
- P.17** *Energy harvesting from electromagnetic emissions compact fluorescent lamps*, Monti G., Congedo F., Arcuti P., Tarricone L.
- P.18** *A procedure for estimation on the electromagnetic field exposure levels*, Strappini M., Angelucci M., Vecchiocattivi M., Gianola P., Scotti R., Villani V., Migagheli D.
- P.19** *Workers exposure to cell phone radiations the verdict of the supreme court of cassation in Italy*, Bisceglia B.
- P.20** *Some recent advancements in optimal constrained power focusing for microwave hyperthermia*, Crocco L., Di Donato L., Iero D.A.M., Isernia T., Scapatucci R.
- P.21** *Electromagnetic technology for visually impaired people*, Di Mattia V.
- P.22** *Estimation of neuromagnetic sources using the REweighted, STandardized, Recursively Iterated Cerebral Tomography Algorithm (RESTRICTA).*, Muzi M.
- P.23** *Analytical optimization methods to design coils for magnetic field gradients*, Tannino M., Mangini F.
- P.24** *Nanoparticle studies for biomedical applications*, Iovine R., Tarparelli R., Vegni L.
- P.25** *Electromagnetic interaction with the stained glass windows of the Magdalene chapel in the basilica in Assisi*, Rivaroli L., Stoja E., Mangini F.
- P.26** *Non-local susceptibility of the wire medium in the presence of planar boundaries*, Hanson G.W., Silveirinha M.G., Burghignoli P., Yakovlev A.B.
- P.27** *Fast tunable fiber optical frequency comb based on cascaded four-wave mixing*, Chiarello F.
- P.28** *In soil distributed temperature measurements for small scale physical models*, Bersan S., Schenato L., Rajendran A., Palmieri L., Cola S., Pasuto A., Galtarossa A., Simonini P.
- P.29** *All-solid photonic bandgap fibers with microstructured cladding*, Coscelli E., Poli F., Cucinotta A., Selleri S.

- P.30** *Hydrometeor Extinction Modeling For Free-space Optical Channel Characterization: Rain And Snow Effects*, Mori S., Marzano F.S., Tosi Beleffi G.M., Di Bartolo S.
- P.31** *Bit error rate evaluation of a silicon-on-insulator optical-network-on-chip router*, Parini A., Annoni A., Morichetti F., Melloni A., Bellanca G.
- P.32** *Processing of thin film materials by means of ns and ps laser radiation*, Sozzi M., Lutey A., Selleri S., Cucinotta A.
- P.33** *Wideband THz time domain spectroscopy set-up based on ultrafast pulsed laser: model and experiments*, Tomasino A., Stivala S., Busacca A.C., Cino A.C., Peccianti M., Morandotti R.
- P.34** *Arc curvature effect on confinement loss in hypocycloid hollow core kagome fibers*, Masruri M., Vincetti L., Debord B., Alharbi M., Bradley T., Fourcade-Dutin C., Wang Y.Y., G er ome F., Benabid F.
- P.35** *Neural network approaches to polarimetric SAR data processing*, Avezzano R.G., Del Frate F., Schiavon G.
- P.36** *Phaseless microwave imaging of dielectric targets: a combined two-probes/inexact-Newton method*, Costanzo S., Borgia A., Di Massa G., Pastorino M., Randazzo A.
- P.37** *Entropy based clutter mitigation in TWI*, Cuccaro A., Solimene R., Pierri R.
- P.38** *Grating lobes in synthetic arrays: effects and compensation*, Di Martino G., Iodice A., Riccio D., Ruello G.
- P.39** *Imaging and inverse scattering @ ELEDIA research center*, Donelli M., Anselmi N., Oliveri G., Poli L., Rocca P., Tenuti L., Salucci M., Massa A.
- P.40** *UAV-based antenna verification system: extracted AUT pattern*, Paonessa F., Virone G., Peverini O.A., Addamo G., Orta R., Tascone R., Bolli P.
- P.41** *Synthetic aperture interferometric radiometer: design, trade-off and technology*, Pompili S., Marzano F.S., Varchetta S.
- P.42** *Data model for the exchange of augmented geometrical information: design and implementation*, Rossi F., Sabbadini M., Mioc F.
- P.43** *Statistical prediction of received frames along earth-satellite Ka-band links in deep space missions*, Biscarini M., Marzano F.S., Montopoli M., De Sanctis K., Iess L., Gregnanin M., Parisi M., Montagna M., Lanucara M.
- P.44** *EBG-based spatial filters for directive antennas: a comparison between two different mechanisms*, Ceccuzzi S., Pajewski L., Ponti C., Schettini G.
- P.45** *A statistical model for the propagation through wave chaotic systems*, Gradoni G.
- P.46** *Wireless sensor network planning with electromagnetics*, Di Martino G., Iodice A., Riccio D., Ruello G.

- P.47** *A convergence study between the models of a multilayer sphere and a radial uniaxial sphere*, Mangini F., Tedeschi N.
- P.48** *Electromagnetic interaction with an alignment of spheres within a host sphere*, Mangini F.
- P.49** *Cylindrical-wave reflection by plane interfaces as a solution of the inhomogeneous Bessel equation*, Tedeschi N.
- P.50** *Leaky wave interactions with a planar interface between dissipative media*, Tedeschi N.
- P.51** *Homework Open-source Platform (HOP) to test the students' knowledge in electromagnetics*, Zappelli L.

List Of Authors

Aceves A.B.: S4.6
 Addamo G.: S3.2, S8.5, P.40
 Agneessens S.: S3.3
 Alharbi M.: P.34
 Allegretti M.: S10.2
 Amabile C.: S11.2
 Amendola G.: P.11
 Amicucci L.: S6.1
 Amitrano D.: S10.4
 Angeloni G.: S5.3
 Angelucci M.: P.18
 Angiulli G.: S7.1
 Anniballe R.: S1.4
 Annoni A.: P.31, S4.1
 Anselmi N.: P.39, P.09
 Araneo R.: S9.4
 Arcioni P.: S11.5
 Arcuti P.: P.17
 Argyros A.: S2.5
 Arnieri E.: P.11
 Assanto G.: S4.8
 Avezzano R.G.: P.35
 Baccarelli P.: S7.7
 Barbiroli M.: S6.8
 Barbuto M.: S7.5
 Baroni A.: P.02, S3.4
 Baronio F.: S4.7
 Barthélémy A.: S4.6
 Bartolucci G.: S7.4
 Bassi P.: S4.1, S2.5
 Bastianelli L.: P.12
 Bekele E.: P.09
 Bellanca G.: P.31, S4.1, S2.5, S4.5
 Bellizzi G.: S11.3
 Benabid F.: P.34
 Berardino P.: S10.6
 Bersan S.: P.28
 Bertoldo S.: S10.2
 Bevacqua M.: S12.4, S11.4
 Bianchi G.: P.01
 Bianco G.V.: S9.3
 Bilotti F.: S7.5
 Biscarini M.: P.43
 Bisceglia B.: S1.5, P.19
 Bjarklev A.O.: PL.1
 Boccia L.: P.11
 Bolli P.: P.40, P.01
 Bonafoni S.: S1.4
 Borgia A.: S5.5, P.36, P.14
 Boscolo S.: S9.2
 Bozzetti M.: S5.3
 Bozzi M.: S11.5, P.13, S3.1, S3.3
 Bradley T.: P.34
 Braglia A.: S2.2
 Brancaccio A.: S12.1
 Bressan M.: S3.1
 Bruno G.: S9.3
 Bucci O.M.: S11.3, S5.7
 Buffi A.: P.02, S3.5
 Burghignoli P.: S9.4, P.26, S7.7
 Busacca A.C.: P.33, S4.8
 Buttazzoni G.: P.03
 Calò G.: S4.4
 Candiani A.: S2.1
 Capobianco A.D.: S9.2
 Cardinali A.: S6.1
 Carlin M.: P.09
 Carminati M.: S4.2
 Carta P.: S5.3
 Caso R.: P.02, S3.5
 Cassarino S.: S11.2
 Castaldo C.: S6.1
 Castellano T.: S5.3
 Castiglione S.: S1.5
 Castorina G.: S1.3
 Castro G.: S8.2
 Casula G.A.: S3.6, P.04
 Catapano I.: S12.2
 Cavagnaro M.: S11.2, S11.1
 Ceccuzzi S.: P.44
 Celona L.: S8.2
 Cerri G.: S8.3
 Cesario R.: S6.1
 Chiapperino M.: S5.3
 Chiarello F.: P.27
 Ciatelli A.: S1.5
 Cino A.C.: P.33, S4.8
 Ciotola A.: S6.7
 Cola S.: P.28
 Comite D.: S12.2
 Conforti M.: S4.7, S4.5
 Congedo F.: P.17
 Coscelli E.: S2.3, P.29
 Costa F.: S5.8, S7.8
 Costanzo A.: P.08, P.07, P.14
 Costanzo S.: S5.2, S5.5, P.05, P.36, P.14
 Couderc V.: S4.6
 Crocco L.: S12.4, P.20
 Cuccaro A.: P.37
 Cucinotta A.: S2.3, S2.4, S2.1, P.29, P.32
 Curcio L.: S4.8
 D'Agostino F.: S5.4, P.06
 D'Alessandro A.: P.02
 D'Orazio A.: S9.3
 De Angelis C.: S9.2
 De Carlo D.: S7.1
 De Ceglia D.: S9.3
 De Leo A.: S8.3
 De Palma L.: S4.3
 De Sanctis K.: P.43
 De Vittorio M.: S9.3
 Debord B.: P.34
 Degasperis A.: S4.7
 Degli-Esposti V.: S6.8
 Del Frate F.: P.35
 Di Bartolo S.: P.30
 Di Donato A.: S11.6
 Di Donato L.: S8.2, S1.3, S12.4, P.20
 Di Filippo M.: S5.6
 Di Luca A.: S1.5
 Di Martino G.: P.46, S10.4, S10.5, P.38, S6.7
 Di Massa G.: S5.2, S5.5, P.36, P.14
 Di Mattia V.: P.21
 Di Murro F.: S8.4
 Di Ruscio D.: S7.7
 Di Simone A.: S10.5
 Dionigi M.: S1.1, P.16
 Donelli M.: P.39, P.09
 Esposito C.: S10.6
 Esposito D.: S1.5
 Ettorre M.: S6.2
 Falciaesecca G.: S6.8
 Fanti A.: S8.6
 Fantuzzi M.: P.07
 Farina L.: S11.2
 Farina M.: S11.6, S5.3
 Ferrara F.: S5.4, P.06
 Ferrari G.: S4.2
 Ferrari M.: S4.3
 Fornaro G.: S10.6
 Fourcade-Dutin C.: P.34
 Franceschetti G.: S1.2
 Francia P.: P.08
 Frezza F.: S11.1
 Fuscaldo W.: S6.2
 Fuschini F.: S6.8
 Galli A.: S7.7, S6.2, S3.7, S12.2, S6.1
 Galli P.: S9.1
 Galtarossa A.: S2.6, P.28

Gammino S.: S8.2
 Gao S.: P.11
 Gauthier-Lafaye O.: S4.4
 Gennarelli C.: S5.4, P.06
 Genovesi S.: S5.8, S7.8
 Giannini A.: S3.1
 Gianola P.: P.18
 Giarola E.: P.15
 Gifuni A.: S10.6
 Giorcelli M.: S9.6
 Goldberg S.N.: S11.2
 Gradoni G.: S6.3, P.45
 Grande M.: S4.4, S9.3
 Gregnanin M.: P.43
 Grillanda S.: S4.2, S4.1
 Guerriero R.: S5.4, P.06
 G r me F.: P.34
 Hajj Yahya M.: S9.6
 Hanson G.W.: S9.4, P.26
 Iero D.A.M.: P.20
 Iess L.: P.43
 Iodice A.: P.46, S1.2, S10.4,
 S10.5, P.38, S6.7
 Iovine R.: P.24
 Isernia T.: S8.2, S12.4, P.20
 Jackson G.: S10.6
 Kaynak M.: P.11
 Khalid M.: S7.2
 Kimerling L.C.: S9.1
 Kishi T.: S4.3
 Krupa K.: S4.6
 La Spada L.: S7.6, S7.3
 Labruy re A.: S4.6
 Lanari R.: S10.6
 Lanucara M.: P.43
 Laurita R.: S11.1
 Lemme M.: PL.2
 Leon-Saval S.G.: S2.5
 Leone G.: S12.1
 Leuzzi G.: P.16
 Lingua A.: P.01
 Liu Y.: S2.2
 Locatelli A.: S9.2
 Lombardi F.M.: P.16
 Lopresto V.: S11.2
 Losito O.: S5.3
 Lovat G.: S9.4
 Love J.D.: S2.5
 Lozes-Dupuy F.: S4.4
 Lucci L.: S5.6
 Lucianaz C.: S10.2
 Lucibello A.: S7.4
 Lucido M.: S8.4
 Lumia M.: S3.2
 Luo Q.: P.11
 Lutey A.: P.32
 Lwin R.: S2.5
 Magenes G.: S11.5
 Magno G.: S4.4, S9.3
 Maisto M.A.: S12.3
 Malaguti S.: S4.1, S4.5
 Manara G.: S5.8, S7.8
 Mangini F.: P.48, P.47, S1.6,
 S6.4, S6.5, P.23, P.25
 Manica L.: P.09
 Marcelli R.: S7.4
 Marchesi S.: P.15
 Mari E.: P.10
 Mariani Primiani V.: S8.3, P.12
 Marzano F.S.: P.30, P.41, P.43,
 S10.3
 Mascali D.: S8.2
 Masotti D.: P.08, P.07
 Masruri M.: S2.4, P.34
 Massa A.: P.15, P.39, P.09
 Mastro F.: P.08
 Matrone G.: S11.5
 Mauro G.S.: S1.3
 Maxia P.: P.04
 Mazzanti A.: S11.5
 Mazzarella G.: P.04, S8.6
 Mazzocchi S.: S3.7
 Melloni A.: S4.2, P.31, S4.1
 Mencarelli D.: S11.6, S5.3
 Meniconi E.: P.11
 Michel A.: P.02, S3.5
 Michel J.: S9.1
 Midrio M.: S9.2, S9.1
 Migagheli D.: P.18
 Migliorati M.: S8.1
 Migliore M. D.: S5.5
 Migliozi M.: S5.4, P.06
 Minoni U.: S4.6
 Mioc F.: P.42
 Miscuglio M.: S9.6
 Modotto D.: S4.6
 Moglie F.: P.12
 Molardi C.: S2.3
 Monari J.: P.01
 Mongiardo M.: S1.1, P.16
 Monmayrant A.: S4.4
 Monorchio A.: S5.8, S7.8
 Montagna M.: P.43
 Monti A.: S7.5
 Monti G.: P.17
 Montisci G.: P.04
 Montopoli M.: P.43
 Morabito A.F.: S1.3
 Morandotti R.: P.33
 Moreno H.O.: S5.2
 Mori S.: P.30, S10.3
 Morichetti F.: S4.2, P.31, S4.1
 Morini A.: S5.3
 Moro R.: S3.3
 Morrone L.: P.14
 Mor ac A.: S4.3
 Moscato S.: S11.5
 Murgia M.: P.01
 Muzi M.: S1.6, P.22
 Napoli F.: S6.1
 Nazabal V.: S4.3
 Nepa P.: P.02, S3.4
 Neri L.: S8.2
 Nissenbaum Y.: S11.2
 Notarpietro R.: S10.1
 Ntibarikure L.: S8.7
 Oliveri G.: S9.5, P.39, P.09
 Onorato M.: S4.7
 Orlandi P.: S4.1
 Orta R.: S3.2, P.40
 Pajewski L.: P.44
 Palma G.: S4.3
 Palmieri L.: S2.6, P.28
 Paonessa F.: P.40
 Parini A.: P.31, S4.1, S2.5
 Parisi G.: P.10
 Parisi M.: P.43
 Pasian M.: S11.5, P.13, S3.1
 Pastorino M.: P.36, S12.5
 Pasuto A.: P.28
 Pauciullo A.: S10.6
 Peccianti M.: P.33
 Pei Y.: S10.1
 Pelosi G.: S8.7, S5.6
 Perini F.: P.01
 Perna S.: S5.7, S10.6
 Perona G.: S10.2
 Perregri L.: S11.5, P.13, S3.1
 Perrone G.: S2.2
 Persichelli S.: S8.1
 Peruzzi G.: PL.3
 Petruzzelli V.: S4.4, S9.3
 Peverini O.A.: S3.2, P.40
 Pierdicca N.: S1.4, S10.3
 Pierri R.: S12.3, P.37
 Pietrangelo T.: S11.6
 Pinchera D.: S5.5, S5.7
 Pinto R.: S11.2
 Poli F.: S2.3, P.29
 Poli L.: P.39, P.09
 Polo A.: P.15
 Polverari F.: S10.3
 Pompili S.: P.41
 Ponti C.: P.44, S6.6
 Proietti E.: S7.4
 Prudenzeno F.: S5.3, S4.3
 Pulvirenti L.: S10.3
 Pupillo G.: P.01

Purtova T.: P.11
 Raffetto M.: S12.5
 Raffo A.: P.14
 Rajendran A.: P.28
 Ramaccia D.: S7.5
 Randazzo A.: P.36, S12.5
 Renghini C.: S5.3
 Riccio D.: P.46, S1.2, S10.4,
 S10.5, P.38, S6.7
 Riesen N.: S2.5
 Rivaroli L.: P.25
 Rizzoli V.: P.08, P.07
 Robol F.: P.15
 Rocca P.: P.39, S5.1, P.09
 Rogier H.: S3.3
 Romagnoli M.: S9.1
 Romanato F.: P.10
 Rorato O.: S10.2
 Rossi F.: P.42
 Ruello G.: P.46, S1.2, S10.4,
 S10.5, P.38, S6.7
 Russo P.: S8.3
 Sabbadini M.: P.42
 Salucci M.: P.39, P.09
 Sampietro M.: S4.2
 Sandhu A.I.: P.11
 Santagiustina M.: S2.6
 Santini C.: S6.5
 Sardi G.M.: S7.4
 Sassaroli D.: S3.7
 Sauleau R.: S6.2
 Savi P.: S10.1, S9.6
 Scalora M.: S9.3
 Scapaticci R.: P.20, S11.4
 Schenato L.: P.28
 Schettini G.: P.44, S6.1
 Schettino F.: S8.4
 Schiavon G.: P.35
 Schillirò F.: P.01
 Schumacher H.: P.11
 Scotti R.: P.18
 Selleri S.: S2.3, S8.7, S5.6, S2.4,
 S2.1, P.29, P.32
 Sgrò A.: S7.1
 Shalaby B.M.: S4.6
 Shamsafar A.: P.11
 Silveirinha M.G.: P.26
 Simonini P.: P.28
 Soldovieri F.: S12.2
 Solimene R.: S12.3, P.37, S12.1
 Someda C.G.: P.10
 Sorbello G.: S8.2, S1.3
 Sorel M.: S4.1
 Sozzi M.: P.32
 Spadafora F.: P.14
 Spinello F.: P.10
 Stivala S.: P.33, S4.8
 Stoja E.: S1.6, P.25
 Stomeo T.: S9.3
 Stornelli V.: P.16
 Strain M.J.: S4.1
 Strappini M.: P.18
 Summers P.: S11.5
 Svelto F.: S11.5
 Tagliaferro A.: S9.6
 Tamburini F.: P.10
 Tannino M.: P.23, S11.1
 Tarabani F.: P.11
 Tarparelli R.: P.24
 Tarricone L.: P.17
 Tartarini G.: P.01
 Tascone R.: S3.2, P.40
 Tedeschi N.: P.47, P.49, P.50,
 S6.4, S6.5
 Tenuti L.: P.39, P.09
 Tian L.: S6.8
 Tibaldi A.: S8.5
 Tillack B.: P.11
 Tomasino A.: P.33, S4.8
 Tonello A.: S4.6
 Torrisi G.: S8.2
 Toscano A.: S7.5
 Tosi Beleffi G.M.: P.30
 Tosoratti N.: S11.2
 Trillo S.: S4.5
 Tuccillo A.A.: S6.1
 Valenta V.: P.11
 Valerio G.: S6.2
 Varchetta S.: P.41
 Vecchiocattivi M.: P.18
 Vegni L.: S7.6, S7.3, P.24
 Venanzoni G.: S5.3
 Venneri F.: P.05
 Vescovo R.: P.03
 Viani F.: P.15, S12.6
 Villani V.: P.18
 Vincenti M.A.: S9.3
 Vincetti L.: S2.4, P.34
 Virone G.: S3.2, P.40, P.01
 Vitucci E.M.: S6.8
 Wabnitz S.: S4.7, S4.6
 Wang Y.Y.: P.34
 Weiss N.: S11.2
 Yakovlev A.B.: P.26
 Yano T.: S4.3
 Zambiasi L.: P.09
 Zappelli L.: P.51
 Zappini L.: P.15
 Ziegler V.: P.11
 Zorer A.: P.15
 Zucca M.: S3.7