# CURRICULUM VITAE

## Annalisa Pascarella

### PERSONAL DATA


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| Name and Surname: | Annalisa Pascarella |
| Date and place of birth: | 30/12/1975, Messina (Italy) |
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### ACADEMIC CURRICULUM

**October 2011 to present.** Permanent Researcher at Istituto per le Applicazioni del Calcolo (IAC) "M. Picone", CNR (National Research Council), Roma

**May, 2010 - October 2011.** Fellowship on *Quantitative analysis of electroencephalographic and EEG-fMRI data* at the Neuroscience Department of the University of Parma
Research director: Prof. Giacomo Rizzolatti

**January 2010 - April 2010.** Fellowship on *Correction of geometric distorsions of Magnetic Resonance Images* at the Mathematics Department of the University of Genova
Research director: Prof. Michele Piana

**January 2009 - December 2009.** Fellowship on *Bayesian Tracking of oscillatory activity from MEG signal* at the Computer Science Department of the University of Verona
Research director: Prof. Michele Piana

**January 2008 - December 2008.** Fellowship on *Methods for data analysis in Magnetoencephalography (MEG)* at the Computer Science Department of the University of Verona
Research director: Prof. Michele Piana

### STUDIES

**April 18 2008. PhD in Mathematics and Applications** at the Mathematics Department of the University of Genova
*Thesis*: Mathematical methods for solving the Magnetoencephalography inverse problem: spatial filters, particle filters and multiple signal classification
*Supervisor*: Prof. Michele Piana

**2003-2004. Master in Applied Mathematics** at the University Bicocca of Milano
*Thesis*: Magnetoencephalography: the inverse problem and an application to a real case
*Supervisors*: Prof. Mario Bertero and Prof. Michele Piana

**1999-2000. Master in Information Technology** at CEFRIEL (a research and education Center in Information Technology) - Politecnico of Milano
*Thesis*:Automatic generation of bordereau SIAE with bitstream labelling and audio watermarking techniques
*Research area*: Image and Audio Processing

**1994-1999. Degree in Mathematics** achieved on 11th March 1999 at the Mathematics Department of the University of Messina with full mark (110/110 cum laude)
*Thesis*: Considerazioni sulla fluidodinamica relativistica in presenza di fenomeni dissipativi
*Supervisor*: Prof. Sebastiano Giambó

## VISITS AT FOREIGN LABS

**2017.** Centre de Recherche en Neurosciences de Lyon, Dycog team. (`http://`), January.

**2016.** Psychology Department, University of Montreal, Quebec, Canada. Collaboration with Prof. Karim Jerbi (`http://www.karimjerbi.com//`), from March to June, from November to December.

**2015.** Psychology Department, University of Montreal, Quebec, Canada. Collaboration with Prof. Karim Jerbi (`http://www.karimjerbi.com//`), September.

**2014.** Serre Lab (`http://serre-lab.clps.brown.edu/`), Department of Cognitive, Linguistic and Psychological Sciences (CLPS), Brown University, Providence, RI, USA, September

**2013.** Serre Lab (`http://serre-lab.clps.brown.edu/`), Department of Cognitive, Linguistic and Psychological Sciences (CLPS), Brown University, Providence, RI, USA, October

**2011.** Low Temperature Laboratory, Brain Research Unit, Helsinki University of Technology, Finland, September

**2010.** Neurospin, CEA Saclay Center, Paris, France, January

**2008.** Low Temperature Laboratory, Brain Research Unit, Helsinki University of Technology, Finland, November

## RESEARCH GRANTS

**2015.** Short Term Mobility grant *Functional connectivity and graph theory.* **principal investigator**

**2014.** GNCS (National Group of Scientific Computing) grant 2014: *Sparsity in Applied Inverse Problems*

**2013.** GNCS (National Group of Scientific Computing) grant 2013: *Multiscale and Bayesian methods for the multimodal analysis*

**2012.** GNCS (National Group of Scientific Computing) grant 2012: *Data analysis of neuromagnetic data to validate a computational model of the visual cortex.* **principal investigator**

**2009-2010.** *Reduction of distortion effects in MRI*, contractor Paramed srl

**2010-2012.** FP7-HEALTH-2007-A, collaborative research project *MEGMRI Hybrid MEG-MRI Imaging System*

**2010.** GNCS (National Group of Scientific Computing) grant 2010: *Computational methods in neuroscience*

**2009.** GNCS (National Group of Scientific Computing) call for young researchers: *Validation of computational methods of visual cortex.* **principal investigator**

**2008-2010.** CARIVE Cassa di Risparmio di Verona: *Bayesian Tracking of brain oscillatory activity*

**2008.** GNCS (National Group of Scientific Computing) call for young researchers: *Methods to solve the magnetoencephalography inverse problem.* **principal investigator**

**2007.** GNCS (National Group of Scientific Computing) grant to participate to the *Fifth Workshop on Bayesian Inference in Stochastic Processes (BISP5)*, Valencia (Spain), June 14-16. **principal investigator**

**2006-2008.** MIUR PRIN, *Inverse methods in action: analysis of magnetoencephalography (MEG) time series and imaging-spectroscopy for the Reuven Ramaty High Energy Solar Spectroscopic Imager (RHESSI)*

**2006-2007.** University of Verona Joint Projects: *Integrating Information in Medical Imaging (IIMI)*

**TALKS**

1. *MEG Source Reconstruction Pipeline*, Club MEG, Lyon, Francia, 19 January 19th 2017. **invited**
2. *MEG Source Reconstruction Pipeline*, NeuroPype 2016, Montreal, Quebec, Canada, May 11th 2016. **invited**
3. *M-EEG Brain Source Localization*, Dipartimento di Ingegneria, Università di Ancona, November 16th 2015. **invited**
4. *A BeamFormer for source localization in ElectroCOrticoGraphy*, SIMAI 2014, Taormina (Italy), July 7 2014. **invited**
5. *M/EEG source localization tutorial*, Department of Cognitive, Linguistic and Psychological Sciences (CLPS), Brown University, Providence, RI, USA, October 22 2013. **invited**
6. *Inverse problems in medical imaging*, Dipartimento di Ingegneria Chimica, Gestionale, Informatica, Università degli Studi di Palermo (Italy), April 30 2013. **invited**
7. *Workshop GNCS 2012*, Montecatini (Italy), November 15 2012. Title: *Data analysis of neuromagnetic data to validate a computational model of the visual cortex*

8. *Istituto per le Applicazioni del Calcolo "Mauro Picone": Nuove prospettive e Sviluppi della Ricerca Applicata*, Roma (Italy), November 24 2011. Title: *Inverse problems in medical imaging.*

9. *The MEEG inverse problem*, Dipartimento di Neurologia, Università degli Studi di Parma (Italy), November 17 2010. **invited**

10. *Wokshop SIMAI giovani "Prospettive di sviluppo della matematica applicata in Italia 2011 In ricordo di Vinicio Boffi"*, Roma (Italy), April 8 2011. Title: *A Particle Filtering toolbox for magnetoencephalographic data*

11. *Wokshop SIMAI "Prospettive di sviluppo della matematica applicata in Italia 2009"*, Roma (Italy), October 9 2009. Title: *Correction of geometrical distortions in MR images*

12. *International Conference on Mathematical Problems in Engineering, Aerospace and Sciences*, Genova (Italy), June 25-27, 2008. Title: *Mathematical methods for solving the MEG inverse problem: beamformers, particle filters and multiple signal classification*

13. *I Workshop in Methods for Image and Data Analysis (MIDA)*, Genova (Italy), May 18, 2006. Title: *MUSIC for MagnetoEncephaloGraphy (MEG)*

## SOFTWARE

HADES (`http://hades.dima.unige.it`), software for estimating current dipoles from MEG data

C software to correct the geometrical distortions in Magnetic Resonance Images, in collaboration with Paramed SrL (`www.paramed.it`)

## INVITED PEER REVIEWER

NeuroImage, MIUR (Ministry of Education, University and Research), OHBM (Organization for Human Brain Mapping)

## WORK EXPERIENCE

**2000-2004.** Employed in an Italian consulting company, Etnoteam S.p.A. as *senior software developer*. Consultant for Vodafone, H3G, Siemens for project in telecommunication field. Programming language used were C, C++, Java

## TEACHING ACTIVITY

**Academic year 2015/2016.** *Numerical Analysis*, Bachelor's Degree in Electrical Engineering, University of La Sapienza, Roma, Italy

**Academic year 2014/2015.** *Numerical Analysis*, Bachelor's Degree in Electrical Engineering, University of La Sapienza, Roma, Italy

**Academic year 2013/2014.** *Numerical Analysis*, Bachelor's Degree in Telecommunications Engineering, University of La Sapienza, Roma, Italy

**Academic year 2013/2014.** *Programming and Numerical Methods*, Tutor for students of Degree in Aerospace Engineering, University of La Sapienza, Roma, Italy

**Academic year 2012/2013.** *Numerical Analysis*, Bachelor's Degree in Engineering, University of La Sapienza, Roma, Italy

**Academic year 2011/2012.** Tutorial on *Magnetic Resonance Imaging*, Master's Degree in Mathematics, University of Genova, Italy

**Academic year 2011/2012.** *Stochastic Processes*, Bachelor's Degree in Mathematics, University of Genova, Italy

**Academic year 2010/2011.** *Stochastic Processes*, Bachelor's Degree in Mathematics, University of Genova, Italy

**Academic year 2010/2011.** *Information Retrieval Systems*, Master's Degree in Journalism and Publishing, University of Verona, Italy

**Academic year 2009/2010.** *Information Retrieval Systems*, Master's Degree in Journalism and Publishing, University of Verona, Italy

**Academic year 2008/2009.** Tutorial on *Magnetic Resonance Imaging*, Master's Degree in Mathematics, University of Genova, Italy

**Academic year 2008/2009.** *Information Retrieval Systems*, Master's Degree in Journalism and Publishing, University of Verona, Italy

**Academic year 2007/2008.** *Computing devices for the journalists*, Master's Degree in Journalism, University of Verona, Italy

**Academic year 2007/2008.** Freshmen tutor at the Department of Mathematics of the University of Genova

**Academic year 2006/2007.** Freshmen tutor at the Department of Engineering of the University of Genova

**Academic year 2005/2006.** Freshmen tutor at the Department of Engineering of the University of Genova

#### Degree Thesis Advisor

*Il problema ai minimi quadrati dell'Elettrocorticografia*, Bachelor's Degree in Mathematics, University of Genova, Italy, a.y. 2013/2014

*Analysis of Electrocorticographic data: forward and inverse problem*, Master's Degree in Mathematics, University of Genova, Italy, a.y. 2012/2013

*Riduzione di distorsioni geometriche in immagini di Risonanza Magnetica*, Master's Degree in in Mathematics, University of Genova, Italy, a.y. 2011/2012

*Costruzione di un proiettore sul sottospazio del segnale per l'analisi di dati biomagnetici*, Bachelor's Degree in Mathematics, University of Genova, Italy, a.y. 2010/2011

*Ricostruzione di immagini per la riduzione di distorsioni geometriche in Risonanza Magnetica*, Master's Degree in Mathematics, University of Genova, a.y. 2010/2011

*Il fenomeno FACEBOOK: comunicare ed informarsi nell'epoca del social network*, Master's Degree in Journalism and Publishing, University of Verona, Italy, a.y. 2010/2011.

*Inversione della matrice di covarianza in un approccio bayesiano al problema della meg*, Bachelor's Degree in Mathematics, University of Genova, Italy, a.y. 2010/2011

*La biblioteca diventa universale: il progetto Google Books*, Master's Degree in Journalism and Publishing, University of Verona, Italy, a.y. 2009/2010.

*Limiti di applicabilità di un metodo di ricostruzione di immagini in Risonanza Magnetica* , Bachelor's Degree in Mathematics, University of Genova, Italy, a.y. 2009/2010.

## SCIENTIFIC ACTIVITY

The Inverse Problem in MagnetoEncephaloGraphy (MEG), ElectroEncephaloGraphy (EEG) and ElectroCOrticoGraphy (ECoG)

The study of techniques to reduce the geometric distortion of the Magnetic esonance (MR) images due to the field's inhomogeneity

## PUBLICATIONS

1. Pascarella A, Todaro C, Clerc M, Serre T and Piana M, *Source modeling of ElectroCorticoGraphy (ECoG) data: Stability analysis and spatial filtering*, Journal of Neuroscience Methods, 263,134-144, 2016

2. Calvetti D, Pascarella A, Pitolli F, Somersalo E and Vantaggi B, *A hierarchical Krylov Bayes iterative inverse solver for MEG with physiological preconditioning*, Inverse Problems, 31(12), 125005, 2015

3. Manca F, Capelli G, La Vigna F, Mazza R, Pascarella A, *Wind-induced salt-wedge intrusion in the Tiber river mouth (Rome-Central Italy)*, Environmental Earth Sciences, 1-13, 2014

4. Avanzini P, Fabbri-Destro M, Campi C, Pascarella A, Barchiesi G, Cattaneo L and Rizzolatti G, *Spatiotemporal dynamics in understanding hand object interactions*, Proceedings of the National Academy of Sciences, 110.40: 15878-15885, 2013

5. Pascarella A and Sorrentino A, *Statistical Approaches to the Inverse Problem*, Magnetoencephalography, Elizabeth W. Pang (Ed.), ISBN: 978-953-307-255-5, InTech, 2011

6. Campi C, Pascarella A, Sorrentino A and Piana M, *Highly Automated Dipole EStimation*, Computational Intelligence and Neuroscience, 982185, 2011

7. Pascarella A, Sorrentino A, Campi C and Piana M, *Particle filtering, beamforming and multiple signal classification for the analysis of magnetoencephalography time series: a comparison of algorithms*, Inverse Problems and Imaging, 4.1: 169-190, 2010

8. Sorrentino A, Parkkonen L, Pascarella A, Campi C and Piana M, *Dynamical MEG Source Modeling with Multi-Target Bayesian Filtering*, Human Brain Mapping 30.6: 1911-1921, 2009

9. Campi C, Pascarella A, Sorrentino A and Piana M, *A Rao-Blackwellized particle filter for magnetoencephalography*, Inverse Problems 24.2: 025023, 2008

## PROCEEDINGS

1. Manca F, Capelli G, La Vigna F, Mazza R and Pascarella A, *Salt-wedge intrusion in river mouths: assessment of wind effect*, National Meeting on Hydrogeology, Flowpath 2014

2. Manca F, Capelli G, La Vigna F, Mazza R and Pascarella A, *Salt-wedge intrusion in river mouths in high discharge periods induced by wind effect*, 41st IAH International Congress "Groundwater : Challenges and Strategies", Marrakech, Morocco, 2014

3. Fabbri-Destro M, Avanzini P, Pascarella A, Cattaneo L and Rizzolatti G, *Action perception: top-down effects*, International Journal of Psychophysiology , 85.3: 370-371, 2012

4. Sorrentino A, Campi C, Pascarella A and Piana M, *PFT: a Particle Filtering Toolbox for MEG*, Front. Neurosci. Conference Abstract: Biomag, 2010

5. Campi C, Pascarella A, Sorrentino A and Piana M *Bayesian Tracking of neural activity in biomagnetic data*, communications to SIMAI congress 3, doi:10.1685/CSC09258, 2009

6. Sorrentino A, Pascarella A, Campi C and Piana M, *A comparative analysis of algorithms for the magnetoencephalography inverse problem*, Journal of Physics: Conference Series, 135 012094, doi:10.1088/1742-6596/135/1/012094, 2008

7. Sorrentino A, Pascarella A, Campi C and Piana M, *Particle filters for magnetoencephalography inverse problem: increasing the efficiency through a semi-analytic approach* Journal of Physics: Conference Series, 124 012046, doi:10.1088/1742-6596/124/1/012046, 2008

8. Pascarella A, Sorrentino A, Piana M and Parkkonen L, *Particle filters and RAP-MUSIC in MEG source modelling: A comparison*, International Congress Series, New Frontiers in Biomagnetism, 1300, 161-164, 2007

9. Caccia G, Lancini R, Pascarella A, Tubaro S and Vicario E *Bitstream Labeling and Audio Watermarking Technologies for Automatic Cue sheet generation Systems*, Photonics West 2001-Electronic Imaging, International Society for Optics and Photonics, 96-103, 2001

**REFEREED ABSTRACTS**

1. Pascarella A, Todaro C, Clerc M, Serre T, and Piana M, *Source modelling of ECoG data: stability analysis and spatial filtering*, 20th International Conference on Biomagnetism, Seoul (South Korea), October 1-6, 2016

2. Meunier D, Pascarella A, Bertrand-Dubois D, Tarek L, Combrisson E, Altukhov D, and Jerbi K, *Welcome to NeuroPype: A Python-based pipeline for advanced MEG and EEG connectivity analyses*, 20th International Conference on Biomagnetism, Seoul (South Korea), October 1-6, 2016

3. Calvetti D, Pascarella A, Pitolli F, Somersalo E and Vantaggi B, , *A hierarchical Krylov-Bayes iterative inverse solver for MEG with anatomical prior*, 20th International Conference on Biomagnetism, Seoul (South Korea), October 1-6, 2016

4. Bertrand-Dubois D, Meunier D, Pascarella A, Lajnef T, Pizzella V, Marzetti L, and Jerbi K, *An MEG investigation of the brain dynamics mediating Focused-Attention andOpen-Monitoring Meditation*, 20th International Conference on Biomagnetism, Seoul (South Korea), October 1-6, 2016

5. Barlaam F, Alves K, Meunier D, Di Rienzo F, Daligault S, Pascarella A, Delpuech C, Schmitz C, and Jerbi K, *Motor learning induces changes in MEG resting-state oscillatory network dynamics*, 20th International Conference on Biomagnetism, Seoul (South Korea), October 1-6, 2016

6. Bertrand-Dubois D, Meunier D, Lajnef T, Pascarella A, Pizzella V, Marzetti L, Jerbi K, *COMPARING THE NEURAL CORRELATES OF FOCUSED-ATTENTION AND OPEN-MONITORING MEDITATION: A MEG STUDY*, 24e JournÃ©e scientifique - CERNEC, Saint-Sauveur, Quebec, Canada, March 11-12, 2016

7. Pascarella A, Meunier D, Bertrand-Dubois D, Lajnef T , Dmitri Altukhov, Jerbi K, *WELCOME TO NEUROPYPE: A PYTHON-BASED PIPELINE FOR ADVANCED MEG AND EEG CONNECTIVITY ANALYSES*, 24e JournÃ©e scientifique - CERNEC, Saint-Sauveur, Quebec, Canada, March 11-12, 2016

8. Meunier D, Pascarella A, Bertrand-Dubois D, Lajnef T, Altukhov D Jerbi K, *Welcome to NeuroPype: A Python-based pipeline for advanced MEG and EEG connectivity analyses*, JournÃ©e NeuroQAM 2016, Montreal, Quebec, Canada, November 25, 2016

9. Pascarella A, Todaro C, Clerc M, Serre T and Piana M, *Source modelling of ElectroCorticoGraphy (ECoG) data: stability analysis and spatial filtering*, International Conference on Basic and Clinical Multimodal Imaging (BACI), Utrecht, September 1-5, 2015

10. Calvetti D, Pascarella A, Pitolli F, Somersalo E and Vantaggi B, *A hierarchical Krylov Bayes iterative inverse solver for MEG with physiological preconditioning*, International Conference on Basic and Clinical Multimodal Imaging (BACI), Utrecht, September 1-5, 2015

11. Tecchio F, Bruni V, Pascarella A, Cottone C, Cancelli A, Vitulano D, *Brain functional connectivity at rest as similarity of neuronal activities*, International Conference on Basic and Clinical Multimodal Imaging (BACI), Utrecht, September 1-5, 2015

12. Pascarella A, Todaro C, Clerc M, Serre T, Piana M, *Source modelling of ElectroCorticoGraphy data: stability analysis and spatial filtering*, Human Brain Mapping 2015, Honolulu, Hawaii (USA), June 14-18, 2015

13. Sommariva S, Sorrentino A, Pascarella A, Waelkens A, Jordanov T, Piana M, *Bayesian estimation of multiple static dipoles from EEG time series: validation of an SMC sampler*, Human Brain Mapping 2015, Honolulu, Hawaii (USA), June 14-18, 2015

14. Tecchio F, Vittoria B, Pascarella A, Cottone C, Cancelli A and Vitulano D, *Brain functional Connectivity at Rest as Similarity of neuronal Activities*, Human Brain Mapping 2015, Honolulu, Hawaii (USA), June 14-18, 2015

15. Pascarella A, Todaro C, Clerc M, Serre T and Piana M, *A BeamFormer for source localization in ElectroCOrticoGraphy*,19th International Conference on Biomagnetism, Halifax (Canada), August 24-28, 2014

16. Pascarella A, *A BeamFormer for source localization in ElectroCOrticoGraphy*, SIMAI 2014, Taormina (Italy), July 7, 2014

17. Sorrentino A, Massone A M, Pascarella A, Campi C, Luria G, Aramini A, Vivaldi V, Sommariva S Piana M, *Mathematical Methods in Neurophysiology*, Workshop "Dagli atomi al cervello", Milan (Italy), January 27, 2014

18. Todaro C, Clerc M, Pascarella A and Piana M, *A BeamFormer for ECoG source localization*, 5th International Workshop on Advances in Electrocorticography, San Diego, CA (USA), November 7-8, 2013

19. Fabbri-Destro M, Avanzini P, Pascarella A, Cattaneo L and Rizzolatti G, *Action perception: top-down effects*, 18th international conference on biomagnetism (BIOMAG 2012), Paris (France), August 26-30, 2012

20. Pascarella A, Avanzini P, Fabbri-Destro M, Cattaneo L, Barchiesi G and Rizzolatti G, *Action understanding: top-down effects*, 8th FENS Forum of Neuroscience, Barcelona (Spain), July 14-18, 2012

21. Pascarella A, Campi C, Piana M and Sorrentino A *A Particle Filtering toolbox for magnetoencephalographic data*, Progress In Electromagnetics Research Symposium, Marrakesh (Marocco), March 20-23, 2011

22. Pascarella A, Campi C, Sorrentino A and Piana M *A comparison of algorithms for the solution of the magnetoencephalography (MEG) inverse problem*, Human Brain Mapping 2010, Barcelona (Spain), June 6-10, 2010

23. Campi C, Pascarella A, Sorrentino A and Piana M *A Particle Filtering toolbox for MEG*, Human Brain Mapping 2010, Barcelona (Spain), June 6-10, 2010

24. Campi C, Pascarella A, Piana M and Sorrentino A *A guide through HADES - The Particle Filter for MEG*, 17th International Conference on Biomagnetism (BIOMAG 2010), Dubrovnik (Croatia), March 28 - April 1, 2010

25. Pascarella A, Sorrentino A, Campi C, Piana M *Random Finite Sets in particle filtering for the reconstruction of neural currents in magnetoencephalography*, Bayesian Inference in Stochastic Process (BISP6), Bressanone (Italy), June 18-20, 2009

26. Sorrentino A, Campi C, Pascarella A, Piana M, Hämäläinen M S, "*Cortical constraints for particle filtering in Magnetoencephalography*", Human Brain Mapping 2009, San Francisco (USA), June 17-22, 2009

27. Campi C, Pascarella A, Sorrentino A, Piana M *Bayesian Tracking of neural activity in biomagnetic data*, SIMAI 2008, Roma, Italy, September 15-19, 2008

28. Pascarella A, Sorrentino A, Campi C, Parkkonen L, Piana M *A comparative analysis of MEG inverse problem solutions: beamformers, RAP-MUSIC and particle filters*, 16th International Conference on Biomagnetism (BIOMAG 2008), Sapporo (Japan), August 25-29, 2008

29. Sorrentino A, Pascarella A, Campi C, Parkkonen L, Piana M *An enhanced particle filter for estimating neural currents from magnetoencephalographic data*, 16th International Conference on Biomagnetism (BIOMAG 2008), Sapporo (Japan), August 25-29, 2008

30. Sorrentino A, Parkkonen L, Campi C, Pascarella A ,Piana M *Recovering oscillatory sources from MEG data: a frequency-domain particle filter approach*,16th International Conference on Biomagnetism (BIOMAG 2008), Sapporo (Japan), August 25-29, 2008

31. Pascarella A, Sorrentino A, Campi C, Piana M *An analysis of algorithms for solving the Magnetoencephalography Inverse Problem* ICNPAA 2008 Mathematical Problems in Engineering, Aerospace and Sciences, Genova, June 25-27, 2008

32. Parkkonen L, Sorrentino A, Campi C, Pascarella A, Piana M *MEG source modeling by Bayesian tracking: Validation of the particle filter approach*, Human Brain Mapping 2008, Melbourne (Australia), June 15-19, 2008

33. Piana M, Campi C, Pascarella A, Sorrentino A *An Analysis of Algorithms for the Solution of the Magnetoencephalography Inverse Problem*, Progress In Electromagnetics Research Symposium, Hangzhou (China), March 24-28, 2008

34. Pascarella A, Sorrentino A, Campi C, Piana M *A Grid-Based Particle Filter for Solving Non-Linear Problems with Linear Computational Cost*, Bayesian Inference in Stochastic Process (BISP5), Valencia (Spain), June 14-16, 2007

35. Campi C, Parkkonen L, Pascarella A, Sorrentino A, Massone A M and Piana M, *Particle Filters in MEG (PFM): a novel method to track multiple neural sources in biomagnetic data*, Human Brain Mapping 2007, Chicago (USA), June 10-14, 2007

36. Sorrentino A, Parkkonen L, Pascarella A, Campi C and Piana M, *Bayesian Tracking of Rhythmic Activity*, Neuroscience Today 2007, Firenze (Italy), March 25-28, 2007

37. Pascarella A *Particle Filters and RAP-MUSIC in MEG source modelling: a comparison*, 15th International Conference on Biomagnetism (BIOMAG 2006), Vancouver (Canada), August 20-26, 2006