

PET/MR and SPECT/MR: New Paradigms for Combined Modalities in Molecular Imaging Conference
La Biadola, Isola d'Elba (Italy), 26 - 30 May 2012

8.30-12.50				16.00-19.30			
Time	Session 1	Time	Session 2	Time	Session 3	Time	Session 4
8.30-8.50	Opening (A. Del Guerra, H. Herzog, G. Loudos)		Advances in Molecular Probes for MR and PET or SPECT (Chair: S. Aime)		Hardware Advances in SPECT Detectors for SPECT-MR (Chair: S. Cherry)		Hardware advances in PET detectors for PET-MR-II (Chair: H. Iida)
	Hardware advances in PET detectors for PET-MR-I (Chair: M. G. Bisogni)	10.50-11.30	Invited - S. AIME (U. Torino, Italy) Design of Imaging Probes for PET/MR and SPECT/MR Hybrid Modalities	16.00-16.40	Invited - B. TSUI (Johns Hopkins U., USA) Technologies and Applications of Simultaneous SPECT/MR Imaging of Small Animals	18.10-18.30	C. PIEMONTE (Fond. B. Kessler, Italy) First Results on Sensitivity Encoded Silicon Photomultipliers
8.50-9.30	Invited - S. CHERRY (UC Davis, USA) Hybrid PET/MRI Technology: Quo Vadis?	11.30-11.50	D. SCHLYER (BNL, USA) Simultaneous PET/MRI Imaging Using Nanoparticles	16.40-17.00	R. VAN HOLEN (Ghent U., Belgium) Development of a Compact MicroSPECT System for Sequential SPECT-MRI	18.30-18.50	D. R. SCHAART (Delft U. of Technology, The Netherlands) Digital SiPM Based Monolithic Scintillator Detectors for High-Resolution, Time-of-Flight PET/MRI
9.30-9.50	G. LLOSA (IFIC - Valencia, Spain) High performance Detector Head for PET and PET-MR with Continuous Crystals and SiPMs	11.50-12.10	M. LEPAGE (U. de Sherbrooke, Canada) Optimization of the Reference Region Method for Dual Pharmacokinetic Modeling Using Gd-DTPA/MRI and 18F-FDG/PET	17.00-17.20	ID: 79 - L.-J. MENG (U. of Illinois at Urbana-Champaign, USA) Development of a Sub-500 um Resolution SPECT System Operated Inside MR Scanners	18.50-19.10	T. WATABE (Osaka U., Japan) Simultaneous PET/MR Imaging Using Si-PM-Based PET and MRI for Development of an Integrated PET/MR System
9.50-10.10	P. CERELLO (INFN - Torino, Italy) An Innovative Detector Concept for Hybrid 4D-PET/MRI Imaging	12.10-12.30	A. K. MISHRA (INCLIA, UMR-CNRS, France) Bis-Biotin Conjugated with DO3A through L-Glutamic Acid Scaffold Using Click Chemistry to Develop MR-PET Probe for Tracing Neuronal Pathway: DO3A-E-Glu-Bis-TzP-Biotin	17.20-17.40	Coffee Break	19.10-19.30	L. G. Cosentino (INFN - LNS) New Developments at LNS-INFN on ToF-DOI PET Based on SiPM Detectors
10.10-10.30	C. KIM (GE Healthcare Molecular Imaging, USA) Time-of-Flight PET-MR Detector Development with Silicon Photomultiplier and its Challenges	12.30-12.50	F. GARIBALDI (U. of Roma 1 and INFN, Italy) TOPEM: a PET TOF Endorectal Probe, Compatible with MRI for Diagnosis and Follow Up of Prostate Cancer	17.40-18.10	Industrial Seminar sponsored by SIEMENS - J. KAMPMEIER (Siemens)		
10.30-10.50	Coffee Break						
8.30-12.50				16.00-20.00			
Time	Session 5	Time	Session 6	Time	Session 7	Time	Session 8
	Whole-body PET-MR Imaging (Chair: H. Herzog)		Human Brain PET-MR Imaging (Chair: J. Shah)		Poster session (Chairs: S. Majewski, N. Belcar)		Other MR-PET Applications (Chair: B. Tsui)
8.30-9.10	Invited - J. Shah (Jülich, Germany) Advances in Ultra-High Field MRI at 9.4T and Hybrid 3T MR-PET	10.50-11.30	Invited - S. Majewski (West Virginia U., USA) Organ Dedicated PET/MR Systems			17.40-18.00	D. SCHLYER (BNL, USA) Clinical Evaluation of a Prototype Simultaneous PET/MRI Based Imaging System
9.10-9.30	G. SCHRAMM (Helmholtz-Zentr Dresden-Rossendorf, Germany) Quantitative Accuracy of MR-Based Attenuation Correction in Whole-Body PET/MR	11.30-11.50	N. DA SILVA (U. of Lisbon, Portugal) Image-Derived Input Functions Obtained in a 3TMR-BrainPET	16.00-17.20	Poster Session	18.00-18.20	J. A. NEVES (LIP, Portugal) Feasibility and Electromagnetic Compatibility Study of the ClearPEM Front-End Electronics for Simultaneous PET-MR Imaging
9.30-9.50	M. VALLIÈRES (McGill U., Canada) PET/MR Imaging for Prediction of Tumor Outcomes by Wavelet Image Fusion and Texture Analysis	11.50-12.10	C. WEIRICH (Jülich, Germany) Status of Quantitative PET Imaging of Simultaneous 3T MR-PET Hybrid Measurements			18.20-18.40	I. NEUNER (Jülich, Germany) Multimodal Imaging: Simultaneous EEG in a Hybrid 3T MR-PET System
9.50-10.10	S. H. KELLER (Copenhagen U. Hospital, Denmark) Evaluation of PET Image Distortions in Clinical PET/MR	12.10-12.30	B. HUTTON (UC London, UK) What Approach to Brain Partial Volume Correction is Best for PET/MRI?			18.40-19.40	Keynote lecture - B. PICHLER (University of Tuebingen, Germany) The Search for the Killer Application in PET-MR
10.10-10.30	S. VANDENBERGHE (MEDISIP-IBBT-Ugent, Belgium) Optimization and Development of High Performance TOF PET-MR Systems: the Sublima Project	12.30-12.50	S. MAJEWSKI (West Virginia University, USA) Development of the Brain PET Insert in the 3Tesla MRI	17.20-17.40	Coffee Break	20:30	Conference Dinner
10.30-10.50	Coffee Break						
8.30-12.50				16.00-19.40			
Time	Session 9	Time	Session 10	Time	Session 11	Time	Session 11 (continued)
	Challenges for the Data/Image Processing in PET-MR (Chair: S. Vandenberghe)		Small Animal PET-MR (Chair: S. Ziegler)		Attenuation and Motion Correction for PET-MR (Chair: D. Visvikis)		
8.30-9.10	Invited - D. VIKSIKIS (INSERM U. Brest, France) Software Challenges and Opportunities in PET/MRI Imaging	10.50-11.10	K. NAGY (Karolinska Institutet, Sweden) Evaluation of a Small Animal PET/MR System	16.00-16.20	ID: 35 - H. QIAN (GE Global Research) Whole-Body PET/MR Attenuation Correction Combining Image Segmentation, Truncation Completion and Atlas-Based Skull Segmentation	17.40-18.00	M. FIESELER (U. Muester, Germany) Motion Correction of Respiratory and Cardiac Gated PET in Hybrid PET/MRI: A Dynamic Torso Phantom Study
9.10-9.30	C. WATSON (Siemens Healthcare) Applications of Positron Beams in an Integrated MR/PET	11.10-11.30	G. BUONINCONTRI (U. of Cambridge, UK) PET/MRI in the infarcted Mouse Heart with the Cambridge Split Magnet	16.20-16.40	P. MOLLET (Ghent U., IBBT-IBITech, Belgium) Transmission-Based Attenuation Correction in a Sequential TOF-PET/MRI System	18.00-18.20	J. SCHEINS (Jülich, Germany) MR-Guided PET Motion Correction in LOR Space Using Generic Projection Data for Image Reconstruction with PRESTO
9.30-9.50	A. LE POGAM (INSERM UMR1101, LaTIM, Brest, France) MRI Data Driven Partial Volume Effects Correction in PET Imaging Using 3D Local Multi Resolution Analysis	11.30-11.50	C. LERCHE (Philips Research Europe) Calibration and Performance Evaluation of a SiPM-Based Simultaneous PET/MR Insert	16.40-17.00	J. BINI (The City College of New York, USA) Preclinical Evaluation of MR-Attenuation Correction versus CT-Attenuation Correction on a Sequential Whole-Body PET/MR Scanner	18.20-18.40	H. FAYAD (INSERM UMR1101, LaTIM, Brest, France) Respiratory Motion Correction in Whole Body PET/MRI Imaging Using a Generalized Reconstruction by Inversion of Coupled Systems (GRICS) Approach
9.50-10.10	O. MUZIK (Wayne State U., USA) Integrative Software Environment for the Analysis of PET and MR Neuroimaging Data	11.50-12.10	S. SAWIAK (U. of Cambridge, UK) Reliability of Fixed Coregistration in Combined PET-MRI with a Split-Magnet Design	17.00-17.20	C. TSOUNMPAS (King's College London, UK) Comparative Evaluation of Two Novel MR-Derived Motion Models for Correction of Real-Time Motion in PET Data	18.40-19.00	M. ULLISCH (Jülich, Germany) MR-Guided Data Framing for PET Motion Correction in Simultaneous MR-PET
10.10-10.30	M. LEPAGE (U. de Sherbrooke, Canada) Arterial Input Function Substitution Between PET and MRI for Pharmacokinetic Modelling	12.10-12.30	L.-J. MENG (U. of Illinois at Urbana-Champaign, USA) Development of Ultra-compact Ultrahigh Resolution CZT and CdTe Detectors for PET Imaging Inside a 14.1T MRI/MRS System	17.20-17.40	Coffee Break	19.00-19.40	Invited - M. TOSETTI (IRCCS Stella Maris, U. of Pisa, Italy) UHF-MR Systems: a New Scenario for PET-MR?
10.30-10.50	Coffee Break			12.30-12.50	C. THOMPSON (McGill University, Canada) Comparison of Single and Dual Layer Detector Blocks for Pre-Clinical MRI-PET	19.40-20.00	Closure