Poster Session III **Wednesday, October 5**

17 : Neurological Disorders

[We-P001]

Functional connectivity biomarker for differentiating neocortical epilepsy and mesial temporal lobe epilepsy

Seung-Hyun Jin* and Chun Kee Chung
Seoul Nat'l Univ., Korea

[We-P002]

MEG cross-frequency analysis in patients with Alzheimer's disease

Marjolein Engels*, Meichen Yu*, Arjan Hillebrand, Philip Scheltens, Wiesje van der Flier, Ilse van Straaten, and Cornelis Stam
VU Univ. Medical Center Amsterdam, The Netherlands

[We-P003]

Comparison of incidental memory between Alzheimer's patients and age matched controls

Rebecca Beresford[1,2]*, Elisa Cooper[2], Andrea Greve[2], and Rik Henson[2]*
[1]Univ. of Cambridge, UK, [2]MRC Cognition and Brain Sciences Unit, UK

[We-P004]

Reduced visual gamma oscillations in multiple sclerosis patients

Eleanor Barratt, Margareta Clarke, Nikos Evangelou, Penny Gowland, Peter Morris, Susan Francis, and Matthew Brookes
Univ. of Nottingham, UK

[We-P005]

Usefulness of source localization using wide time window and multiple frequency band in ictal MEG

Woorim Jeong[1,2], June Sic Kim[2], and Chun Kee Chung[1,2,3]*
[1]Seoul Nat'l Univ. Hospital, Korea, [2]Seoul Nat'l Univ. College of Natural Science, Korea, [3]Seoul Nat'l Univ. Medical Research Center, Korea

[We-P006]

Differences in resting state connectivity in an injured brain under influence of Zolpidem - a case study

Praveen Sripad[1]*, Frank Boers[1], Ralf Clauss[2], Karl-Josef Langen[1], N. Jon Shah[1,3,4], and Jürgen Dammers[1]
[1]Forschungszentrum Juelich, Germany, [2]Royal Surrey County Hospital, UK, [3]Jülich Aachen Research Alliance, Germany, [4]RWTH Aachen, Germany

[We-P007]

Consistency of MEG and fMRI findings in revealing the functional neurocompensatory response in early Alzheimer's disease

Xiaowei Song[1,2,3]*, Careesa C. Liu[2,3], Sujoy Ghosh Hajra[2,3], Gabriela Pawlowski[2], Maggie Clarke[3], Emily Gallivan[3], and Ryan D'Arcy[1,2,3]*
[1]Fraser Health Authority, Canada, [2]Simon Fraser Univ., Canada, [3]Nat'l Research Council, Canada

[We-P008]

Spontaneous theta-band cortical rhythms as a sign of dysfunction in traumatic brain injury patients
Hanna Kaltiainen[1,2,3,4]*, Liisa Helle[1,5]*, Mia Liljeström[1,2], Hanna Renvall[1,2], and Nina Forss[1,2]
[1]Aalto Univ., Finland, [2]Univ. of Helsinki, Finland, [3]Aalto Neuroimaging, MEG Core, Finland, [4]Lohja District Hospital, Finland, [5]Elekta Oy, Finland

[We-P009]

Altered resting state network in fibromyalgia based on persistent network homology
Mi Kyung Choe[1], Manyoel Lim[2], June Sic Kim[1], and Chun Kee Chung[1,2,3]*
[1]Seoul Nat'l Univ. College of Natural Science, Korea, [2]Seoul Nat'l Univ. Medical Research Center, Korea, [3]Seoul Nat'l Univ. Hospital, Korea

[We-P010]

Magnetoencephalography in insular epilepsy
Majed AlHameed* and Vahe Poghosyan*
King Fahad Medical City, Saudi Arabia

[We-P011]

MEG may reveal new population of spike in epilepsy with porencephaliccyst/encephalomalacia
Yosuke Kakisaka[1]*, Irene Wnag[2], Sumiya Shibata[2], and Richard Burgess[2]
[1]Tohoku Univ., Japan, [2]Cleveland Clinic Foundation, USA

[We-P012]

Presurgical evaluation in young children with refractory epilepsy: a pediatric MEG study
Ashley Curran, Banu Ahtam, Kathryn Gill, Chellamani Harini, Matti Hämäläinen, P. Ellen Grant, and Yoshio Okada
Harvard Medical School, USA

[We-P013]

Magnetoencephalogram of dentatorubral-pallidoluysian atrophy
Hiroyuki Yamamoto[1,2]*, Kiyoshi Egawa[2], Masashi Narugami[2], Tomoshiro Ito[2], Chiyo Manabe3, Kayoko Takahash[i3], Shingo Nakane[3], and Hideaki Shiraishi[2]*
[1]Nagoya Univ.,Japan, [2]Hokkaido Univ., Japan, [3]Hokkaido Univ. Hospital, Japan

[We-P014]

The value of "negative" MEG studies: Defining the functional deficit zone using spontaneous MEG in children with intractable epilepsy
Jeremy Moreau[1,2]*, Patricia Tomaszewski[1,2], Jean-Pierre Farmer[2], Jeffrey Atkinson[2], Bernard Rosenblatt[2], Sylvain Baillet[1], and Roy Dudley[2]*
[1]McGill Univ., Canada, [2]Montreal Children`s Hospital, Canada

[We-P015]

Interictal high frequency oscillations detected with simultaneous magnetoencephalography and scalp electroencephalography as biomarker of pediatric epilepsy
Eleonora Tamilia*, Naoaki Tanaka, Joseph R. Madsen, Phillip L. Pearl, Steven Stufflebeam, and Christos Papadelis
Harvard Medical School, USA

[We-P016]

Resting-state MEG reveals different patterns of aberrant functional connectivity in combat-related mild traumatic brain injury

Mingxiong Huang[1,2]*, Deborah Harrington[1,2], Ashley Robb-Swan[2], Annemarie Angeles[2], Sharon Nichols[1], Angela Drake[3], Tao Song[1], Mithun Diwakar[1], Charles Huang[1], Victoria Risbrough[2], Anders Dale[1], Hauke Bartsch[1], Roland Lee[1,2], and Dewleen Baker[1,2]

[1]Univ. of California, San Diego, USA., [2]VA San Diego Healthcare System, USA, [3]Naval Medical Center, USA

[We-P017]

Abnormal cortical source activities in patients with rapid-eye movement sleep behavior disorder during a visuospatial attention task

Kwang Su Cha[1], Jeong Woo Choi[1], Byeong Uk Lee[2], Sun-A Koo[2], Jeong Ik Byun[3], Jun Sang Sunwoo[4], Ki-Young Jung[2], and Kyung Hwan Kim[1]*

[1]Yonsei Univ., Wonju, Korea, [2]Seoul Nat'l Univ. Medical Center, Korea, [3]Kyung Hee Univ. Medical Center, Korea, [4]Soonchunhyang Univ., Korea

[We-P018]

Modulations of extrinsic and intrinsic connections among neuronal sources during epileptic seizures: an intracranial electroencephalographic study using dynamic causal modeling

Chang-hyun Park, Yun Seo Choi, A-Reum Jung, Eun Jin Kwon, Ji-Eun Lee, and Hyang Woon Lee*

Ewha Womans Univ., Korea

[We-P019]

Connectivity in language network after hemispherotomy

Jeong-Sug Kyong[1]*, June Sic Kim[1], and Chun Kee Chung[1,2]*

[1]Seoul Nat'l Univ., Korea, [2]Seoul Nat'l Univ. Hospital, Korea

[We-P020]

Cortical Dis-inhibition in chronic tinnitus: An ERP Study

Jeong-Sug Kyong[1,2], Tae-Soo Noh[2], June Sic Kim[1], Moo-Kyun Park[2], Jun-Ho Lee[2], Seung-Ha Oh[2], Chun Kee Chung[1,2], and Myung-Whan Suh[2]*

[1]Seoul Nat'l Univ., Korea, [2]Seoul Nat'l Univ. Hospital, Korea

[We-P021]

Decreased corticokinematic coherence in patients with Friedreich's Ataxia

Brice Marty[1]*, Gilles Naeije[1], Vincent Wens[1], Mathieu Bourguignon[2], Riitta Hari[3], Veikko Jousmäki[3], Massimo Pandolfo[1], and Xavier De Tiège[1]

[1]Universite Libre de Bruxelles, Belgium, [2]Basque Center on Cognition, Brain & Languag, Spain, [3]Aalto Univ., Finland

[We-P022]

Effective connectivity of epileptic networks using intracranial ictal EEG recordings

Yun Seo Choi[1], Jiseon Lee[1], Chang-Hyun Park[1], A-reum Jung[1], Ji-Eun Lee[1], Eun Jin Kwon[1], Jeong Woo Choi[2], Kyung Hwan Kim[2], Rita Yu[3], Heung Dong Kim[3], and Hyang Woon Lee[1]*

[1]Ewha Womans Univ., Korea, [2]Yonsei Univ., Wonju, Korea, [3]Yonsei Univ. College of Medicine, Korea

[We-P023]

Corticomuscular coherence correlates with critical flicker frequency but not with GABA+/Cr levels in patients with hepatic encephalopathy

Thomas J. Baumgarten[1]*, Markus Butz[1], Georg Oeltzschner[1,2,3], Nienke Hoogenboom[1], Hans-Jörg Wittsack[1], and Alfons Schnitzler[1]
[1]Heinrich Heine Univ. Düsseldorf, Germany, [2]The Johns Hopkins Univ., USA, [3]Kennedy Krieger Inst., USA

[We-P024]

Late restructuring and atypical development of resting state neural synchrony in autism

Annette X. Ye[1,2,3]*, Simeon M. Wong[1,2], Ann-Kathrin Thoene[4], Sam M. Doesburg[5], and Margot J. Taylor[1,2,3]
[1]The Hospital for Sick Children, Canada, [2]The Hospital for Sick Children Research Inst., Canada, [3]Univ. of Toronto, Canada, [4]Universität Oldenburg, Germany, [5]Simon Fraser Univ., Canada

[We-P025]

Comparing phase- and amplitude-mediated intrinsic connectivity networks in mild traumatic brain injury

Benjamin Dunkley[1]*, Leodante Da Costa[2], Allison Bethune[2], Elizabeth Pang[1], and Margot Taylor[1]
[1]The Hospital for Sick Children, Canada, [2]Sunnybrook Hospital, Canada

[We-P026]

MEG/MSI of epilepsy patients with VNS implantation: ECD and sLORETA analy

Wenbo Zhang[1,2]*, Jason Doescher[1,2], and Deanna Dickens[1,2]
[1]Minnesota Epilepsy Group, USA, [2]Univ. of Minnesota, USA

[We-P027]

Dual-mode noninvasive brain Sstimulation for post-stroke cognitive impairment

Ahee Lee, Eunhee Park, Hee Goo Kim, A Young Cho, Won Hyuk Chang, and Yun-Hee Kim*
Sungkyunkwan Univ., Korea,

[We-P028]

A study on interictal MEG source imaging in epileps

Chae Jung Park[1,2], Eun Yeon Joo[2,3], and Seung Bong Hong[2,3]
[1]Samsung Medical Center, Korea, [2]Samsung Biomedical Research Inst., Korea, [3]Sungkyunkwan Univ., Korea

[We-P029]

Assessing recovery of mTBI patients using functional connectivity: A resting state magnetoencephalographic study

George Zouridakis[1], Lianyang Li[1], Xianghong Arakaki[2], Thao Tran[2], Nikhil Padhye[3], and Michael Harrington[2]
[1]Univ. of Houston, USA, [2]Huntington Medical Research Inst., USA, [3]The Univ. of Texas Health Science Center at Houston, USA

[We-P030]

Neural correlates of emotional face processing in young adults with autism spectrum disorder

Rachel Leung[1]*, Elizabeth Pang[1], Evdokia Anagnostou[2], and Margot Taylor[1]
[1]The Hospital for Sick Children, Canada, [2]Holland-Bloorview Kids Rehabilitation Hospital, Canada

18 : Neuro-modulation

[We-P031]

Evidence for state dependent direct effects of alpha band transcranial alternating current stimulation

Philipp Ruhnau[1]*, Thomas Hartmann[1]*, Toralf Neuling[1], Marco Fuscá[2], Christoph Herrmann[3], Gianpaolo Demarchi[1], and Nathan Weisz[1]
[1]CCNS Universität Salzburg, Austria, [2]Univ. of Trento, Italy, [3]Universität Oldenburg, Germany

[We-P032]

Online state-dependent effects of transcranial alternating current stimulation

Marco Fuscà[1]*, Philipp Ruhnau[2], Toralf Neuling[2], Gianpaolo Demarchi[2], and Nathan Weisz[2]
[1]Center for Mind Brain Sciences, Italy, [2]Paris-Lodron Universität Salzburg, Austria

[We-P033]

On the relationship between cortical excitability and visual oscillatory responses: a concurrent tDCS–MEG study

Sophie Esterer[1]*, Tom R. Marshall[2], Jim D. Herring[2], Til O. Bergmann[3], and Ole Jensen[2]
[1]Cardiff Univ., UK, [2]Radboud Univ., The Netherlands, [3]Univ. of Tübingen, Germany

[We-P034]

Modulations on cortical oscillations by levodopa and Subthalamic deep brain stimulation in patients with Parkinson's disease, a MEG study

Chunyan Cao[1]*, Ke Zeng[2], Dianyou Li[1], Shikun Zhan[1], Jing Zhang[1], Xiaoli Li[2], and Bomin Sun[1]*
[1]Ruijin Hospital, China, [2]Beijing Normal Univ., China

[We-P035]

Detecting the pathway of tACS in human brain

Jingwei Sheng*, Yuhui Chai, and Jia-hong Gao
Peking Univ., China

[We-P036]

Effect of transcranial direct current stimulation on visually induced motion sickness

EunHee Chang, Hyeonjin Jeon, and Hyun Taek Kim*
Korea Univ., Korea

[We-P037]

Therapeutic implication of combined rTMS and tDCS for post-stroke motor impairment

Eunhee Park, Jae Yong Cho, Ahee Lee, Won Hyuk Chang, and Yun-Hee Kim *
Sungkyunkwan Univ., Korea

[We-P038]

Imaging phase locking dynamics during transcranial alternating current stimulation (tACS) in the MEG

Matthias Witkowski[1]*, Stephen E. Robinson[2], and Surjo R. Soekadar[1]*
[1]Univ. Hospital of Tübingen, Germany, [2]Nat'l Inst. of Mental Health, USA

19 : Next Generation Technology

[We-P039]

An innovative technology to quantitatively detect liver iron with ultrasensitive magnetoelectric susceptometers

Hao Xi*, Xiaoshi Qian, Meng-Chien Lu, and Qiming Zhang
The Pennsylvania State Univ., USA

[We-P040]

Magneto-trichography: Magnetic fields produced by human hair follicles

Sheraz Khan[1] and David Cohen[1,2]
[1]Harvard Medical School, USA, [2]MIT, USA

[We-P041]

The potential of optically-pumped magnetometers for magnetoencephalography: a simulation study

Elena Boto[1]*, Richard Bowtell[1], Peter Kruger[1], Mark Fromhold[1], Peter Morris[1], Sofie Meyer[2], Gareth Barnes[2], and Matthew Brookes[1]*
[1]Univ. of Nottingham, UK, [2]Univ. College London, UK

[We-P042]

Room temperature magnetoencephalography using optically-pumped magnetometers

Elena Boto[1]*, Sofie Meyer[2], Vishal Shah[3], Orang Alem[3], Svenja Knappe[4], Peter Kruger[1], Mark Fromhold[1], Mark Lim[5], Peter Morris[1], Richard Bowtell[1], Gareth Barnes[2], and Matthew Brookes[1]*
[1]Univ. of Nottingham, UK, [2]Univ. College London, UK, [3]QuSpin Inc., USA, [4]NIST, USA, [5]Chalk Studios Ltd., UK

[We-P043]

In vivo and in vitro magnetic recordings of neuronal activity with GMR sensors

Vincent Trauchessec[1]*, Laure Caruso[1], Josué Trejo-Rosillo[1], Gilles Ouanounou[2], Francesca Barbieri[2], Thierry Bal[2], Alain Destexhe[2], Thomas Wunderle[3], Christopher Lewis[3], Jianguang Ni[3], Claude Fermon[1], Pascal Fries[3,4], and Myriam, Pannetier-Lecoeur[1]
[1]Université Paris Saclay, France, [2]CNRS, France, [3]Ernst Strungmann Inst., Germany, [4]Donders Inst. for Brain, Cognition, Behaviour, The Netherlands

[We-P044]

Innoccuous alginate-based hydrogels for rapid EEG monitoring and cleaning

Patrique Fiedler[1,2]*, Paulo Pedrosa[3,4], Lorenzo Schinaia[2,5], Beatriz Vasconcelos[3], Ana C. Martins[3], Maria H. Amaral[3], Silvia Comani[2,5], Jens Haueisen[1,3], and Carlos Fonseca[3,7]*
[1]TU Ilmenau, Germany, [2]Casa di Cura Privata Villa Serena, Italy, [3]Universidade do Porto, Portugal, [4]Institut FEMTO-ST, France, [5]Univ. "G. d'Annunzio" Pescara-Chieti, Italy, [6]Univ. Hospital Jena, Germany, [7]Univ. of Coimbra, Portugal

[We-P045]

Active magnetic shield for optical neuromagnetic measurements

Joonas Iivanainen* and Lauri Parkkonen
Aalto Univ., Finland

[We-P046]

Visualization of electrophysiological activity in cervical spinal cord and spinal nerves by magnetospinography

Shigenori Kawabata[1]*, Sastoshi Sumiya[1], Yuko Hoshino[1], Yoshiaki Adachi[2], Kensuke Sekihara[1], Shuta Ushio[1], Taishi Watanabe[1,3], and Atsushi Okawa[1]
[1]Tokyo Medical and Dental Univ., Japan, [2]Kanazawa Inst. of Tech., Japan, [3]Ricoh Company, Ltd., Japan

[We-P047]

Quantifying the benefit of high-Tc SQUID-based MEG: comparison of three practical layouts

Bushra Riaz[1]*, Christoph Pfeiffer[2], and Justin Schneiderman[1]
[1]Sahlgrenska Academy and Univ. of Gothenburg, Sweden, [2]Chalmers Univ. of Tech., Sweden

[We-P048]

Development of a 7-channel High-Tc MEG system

Christoph Pfeiffer[1]*, Silvia Ruffieux[1], Justin Schneiderman[2], Maxim Chukharkin[1], Minshu Xie[1], Alexey Kalabukhov[1], and Dag Winkler[1]
[1]Chalmers Univ. of Tech., Sweden, [2]Sahlgrenska Academy and Univ. of Gothenburg, Sweden

[We-P049]

High-Tc SQUID magnetometers for on-scalp MEG

Silvia Ruffieux[1]*, Maxim Chukharkin[1], Minshu Xie[1], Alexey Kalabukhov[1], Christoph Pfeiffer[1], Justin Schneiderman[2], and Dag Winkler[1]
[1]Chalmers Univ. of Tech., Sweden, [2]Sahlgrenska Academy and Univ. of Gothenburg, Sweden

[We-P050]

Measuring long-lived magnetisation using a Magnetoencephalography (MEG) system

Emma Perry, Benjamin Prestwich, Matthew Brookes, and Richard Bowtell
Univ. of Nottingham, UK

[We-P051]

Uninterrupted noise-free operation of a magnetometer-based MEG with a closed cycle helium recycler

Yoshio Okada[1]*, Limin Sun[1], and Chao Wang[2]
[1]Harvard Medical School, USA, [2]Cryomech, Inc., USA

[We-P052]

Detection of magnetic signals from the spinal cord using a single channel MEG sensor

Shaquile Nijjer[1]*, Nicholas Peatfield[1], Mark Tillotson[2], Benjamin McGhie[2], Alexandra Talpalaru[1], Luke Conroy[3], Carolyn Sparrey[1], and Teresa P. L. Cheung[1,4]*
[1]Simon Fraser Univ., Canada, [2]CTF MEG International Services Limited Partnership, Canada, [3]Univ. College Dublin, Ireland, [4]Fraser Health Authority, Canada

20 : Ongoing Activity and Resting State

[We-P053]

Evaluating eyes open versus eyes closed resting-state in Schizophrenia MEG datasets through spectral analysis and functional connectivity

Felicha Candelaria-Cook[1,2]*, Jon Houck[2], Lori Sanfratello[2], Phil Kroth[1], Jose Canive[2], and Julia Stephen[2]
[1]Univ. of New Mexico Health Sciences Center, USA, [2]The Mind Research Network, USA

[We-P054]

Characterization of resting state networks using MEG in a large cohort of healthy subjects.
Praveen Sripad1*, Lukas Breuer[1], Frank Boers[1], Eberhard Eich[1], N. Jon Shah[1,2,3], and Jürgen Dammers[1]
[1]Forschungszentrum Juelich, Germany, [2]RWTH Aachen, Germany, [3]Jülich Aachen Research Alliance, Germany

[We-P055]

Automated analysis of resting state cortical oscillatory characteristics using Magnetoencephalography (MEG)
Thomas Donoghue*, Priyadarshini Sebastian, and Bradley Voytek
Univ. of California, San Diego, USA

[We-P056]

Synchronous intra and cross-networks interactions of the default-mode network
Vincent Wens[1]*, Marc Vander Ghinst[1], Alison Mary[1], Mathieu Bourguignon[2], Brice Marty[1], Gilles Naeije[1], Philippe Peigneux[1], Serge Goldman[1], and Xavier De Tiège[1]
[1]Université Libre de Bruxelles, Belgium, [2]Basque Center on Cognition, Brain & Language, Spain

[We-P057]

Heritability of resting-state functional connectivity in MEG and fMRI
Giles Colclough[1]*, Stephen Smith[2], Thomas Nichols[3], Prejaas Tewarie[4], Matthew Brookes[4], Anderson Winkler[2], Matthew Glasser[5], David Van Essen[5], and Mark Woolrich[1]
[1]Oxford Centre for Human Brain Activity, UK, [2]Oxford Centre for Functional MRI of the Brain, UK, [3]Univ. of Warwick, UK, [4]Univ. of Nottingham, UK, [5]Univ. of Washington, USA

[We-P058]

MEG resting state network connectivity dynamics from childhood to late adulthood
Simeon M. Wong[1]*, Margot J. Taylor[1,2], and Benjamin T Dunkley[1,2]*
[1]Hospital for Sick Children, Canada, [2]Univ. of Toronto, Canada

[We-P059]

Measurement of magnetomyography using an array of magnetoresistive(MR) sensor
Shigenori Kawabata[1], Shuta Ushio[1], Tomohiko Shibuya[2], Yoshiaki Adachi[3], Kensuke Sekihara[1], and Atsushi Okawa[1]
[1]Tokyo Medical and Dental Univ., Japan, [2]TDK Corp., Japan, [3]Kanazawa Inst. of Tech., Japan

[We-P060]

Phase-amplitude coupling in the resting human brain
Janet Giehl[1,2]*, Jörg Hipp[1], Anna-Antonia Pape[1,2], and Markus Siegel[1]*
[1]Univ. of Tübingen, Germany, [2]IMPRS for Cognitive and Systems Neuroscience, Germany

[We-P061]

The electrophysiological connectome is maintained in healthy elders: a power envelope correlation MEG study
Nicolas Coquelet*, Alison Mary, Maribel Pulgarin, Charline Urbain, Serge Goldman, Philippe Peigneux, Vincent Wens, and Xavier De Tiège
Université Libre de Bruxelles, Belgium

[We-P062]

Neuromagnetic default-mode network connectivity correlates with occipital α-band power at rest
Maribel Pulgarin[1]*, Vincent Wens[1], Nicolas Coquelet[1], Marc Vander Ghinst[1], Alison Mary[1], Catherine Clumeck[1], Mathieu Bourguignon[2], Brice Marty[1], Gilles Naeije[1], Philippe Peigneux[1], Serge Goldman[1], and Xavier De Tiège[1]
[1]Université libre de Bruxelles, Belgium, [2]Basque Center on Cognition, Brain & Language, Spain

[We-P063]

Critical dynamics in resting state brain activity is associated with impulsivity and dopamine-related polymorphisms
Jaana Simola[1]*, Matias Palva[1], Tiina Paunio[1,2,3], Katri Kantojärvi[2], Elvira Brattico[4,5], and Satu Palva[1]
[1]Univ. of Helsinki, Finland, [2]Nat'l Inst. for Health and Welfare, Finland, [3]Helsinki Univ. Hospital, Finland, [4]Aarhus Univ., Denmark, [5]The Royal Academy of Music Aarhus, Denmark

[We-P064]

Dynamic scales of spontaneous neuromagnetic activity
Denis Engemann* and Virginie van Wassenhove
INSERM, France

[We-P065]

An exploration of differences in oscillatory resting state networks between patients with schizophrenia and controls
Gemma Williams*, Laura Whitlow, Loes Koelewijn, James Walters, and Krish Singh
Cardiff Univ., UK

21 : Physiological Basis of MEG and EEG Signals

[We-P066]

Consideration of the electromagnetic signal generated by the neural activity assuming pulse-frequency modulation
Masanori Higuchi*
Kanazawa Inst. of Tech., Japan

[We-P067]

Laminar specificity of high and low frequency oscillations during action selection
James Bonaiuto[1]*, Sofie S. Meyer[1], Gareth Barnes[1], Fred Dick[2], and Sven Bestmann[1]
[1]Univ. College London, UK, [2]Univ. of London, UK

[We-P068]

Non-invasive recording of laminar dynamics
Holly Rossiter*, Luzia Troebinger, James Bonaiuto, Sofie Meyer, Sheena Waters, Simon LIttle, Sven Bestmann, and Gareth Barnes*
Univ. College London, UK

[We-P069]

Appraisal of appropriate definition of baseline for somatosensory evoked magnetic fields
Hidekazu Saito[1]*, Shogo Yazawa[1], Jun Shinozaki[1], Hideaki Shiraishi[2], Masao Matsuhashi[3], and Takashi Nagamine[1]
[1]Sapporo Medical Univ., Japan, [2]Hokkaido Univ., Japan, [3]Kyoto Univ., Japan

[We-P070]

Laminar profile of cross-frequency interactions
Mathilde Bonnefond[1]*, Timo van Kerkoerle[2], Pieter Roelfsema[3], and Ole Jensen[1]
[1]Radboud Univ., The Netherlands, [2]Rockefeller Univ., USA, [3]Netherlands Inst. for Neuroscience, The Netherlands

22 : Psychiatric Disorders

[We-P071]

EEG characteristics in first psychotic episode patients
Alejandro Riera[1,2], Giulio Ruffini[1], Aureli Soria-Frish[1], Lluis Fuentemilla[2,3], Diego Lozano-Soldevilla[2], Emilio Rojo[4,5], Oscar Pino[4,2], and Carles Grau[1,2]
[1]Starlab Barcelona SL, Spain, [2]Univ. of Barcelona, Spain, [3]Inst. of Biomedical Research Bellvitge, Spain, [4]Benito Menni CASM, Spain, [5]Int'l Univ. of Catalonia, Spain

[We-P072]

Neural oscillations during social exclusion - a MEG study
Huiying Wang[1,2,3], In-Seon Lee[1,2,3], Paul Enck[1], and Christoph Braun[2,4]*
[1]Univ. of Tübingen, Germany, [2]Univ. Hospital Tübingen, Germany, [3]IMPRS for Cognitive and Systems Neuroscience, Tübingen, Germany, [4]Univ. of Trento, Italy

[We-P073]

Multi-frequency analysis of brain connectivity under negative stimulus in depression: A magnetoencephalography study
Kun Bi[1], Ling-ling Hua[2,] Shui Tian[1], Si-qi Zhang[1], Qing Lu[1,3]*, and Zhi-jian Yao[2]*
[1]Southeast Univ., China, [2]Nanjing Medical Univ., China, [3]Suzhou Research Inst. of Southeast Univ., China

[We-P074]

Differences in task performance between 'High' and 'Low' sub-clinical obsessive compulsive disorder checkers is reflected in MEG recorded Theta activity during a working memory task
Gerard Gooding-Williams[1]*, Hongfang Wang[1], Jonathan Cavanagh[2], Gregor Thut[2], Joachim Gross[2], and Klaus Kessler[1]
[1]Aston Univ., UK, [2]Univ. of Glasgow, UK

[We-P075]

Oscillation power analysis of resting state brain networks in depression: A magnetoencephalography study
Siqi Zhang[1], Kun Bi[1], Shui Tian[1], Qing Lu[1]*, and Zhijian Yao[2,3]*
[1]Southeast Univ., China, [2]Nanjing Medical Univ., China, [3]Nanjing Univ., China

[We-P076]

MEG functional connectivity features between bipolar and unipolar depression patients
Jia Feng Nan, Zhijian Yao*, Tang Hao, Hua Lingling, and Lu Qing
Nanjing Medical Univ., China

[We-P077]

Investigating the regulation of sensory gamma-band activity in autism spectrum disorder (ASD)
Robert Seymour*, Gina Rippon, and Klaus Kessler
Aston Univ., UK

[We-P078]

Effective connectivity of the fronto-striatal pathways in unipolar and bipolar depression

Hao Tang[1], Fengnan Jia[1], Qing Lu[2], Siqi Zhang[2], and Zhijian Yao[1]
[1]Nanjing Medical Univ., China, [2]Southeast Univ., China

[We-P079]

Spatial components of magnetic mismatch negativity with the cortical thickness of its structural correlates in schizophrenia

Jiyoon Seol[1], Minah Kim[2], Kang Ik Cho[1], Je-Yeon Yun[2], Sung Nyun Kim[2], Chun Kee Chung[1,2], and Jun Soo Kwon[1,2]*
[1]Seoul Nat'l Univ. College of Natural Sciences, Korea, [2]Seoul Nat'l Univ. Hospital, Korea

[We-P080]

Multi-layer network connectivity in schizophrenia

Lauren Gascoyne*, Prejaas Tewarie, Matthew Brookes, Peter Morris, Elizabeth Liddle, and Peter Liddle
Univ. of Nottingham, UK

[We-P081]

Altered auditory gamma oscillatory responses in oddball paradigm with schizophrenia patients and subjects at clinical high risk for psychosis: An MEG study

Minah Kim[1], Tak Hyung Lee[2], Tae Young Lee[1], Sung Nyun Kim[1], Chun Kee Chung[1,2], and Jun Soo Kwon[1,2,3]*
[1]Seoul Nat'l Univ. Hospital, Korea, [2]Seoul Nat'l Univ. College of Natural Sciences, Korea, [3]SNU-MRC, Korea

[We-P082]

The dynamic effective connectivity of the subcortical pathway during the early emotion processing state in the major depressive disorder

Lingling Hua[1], Kun Bi[2], Jiabo Shi[1], Hao Tang[1], Rui Yan[1], Qiuxiang Wei[1], Fengnan Jia[1], Qing Lu[2], and Zhijian Yao[1,3]
[1]Nanjing Medical Univ., China, [2]Southeast Univ., China, [3]Nanjing Univ., China

[We-P083]

Topological properties of brain structural networks in bipolar disorder patients initially diagnosed of major depressive disorder: a 5-year prospective longitudinal study

Haiyan Liu[1], Jiabo Shi[1], Yu Chen[1], Qing Lu[2], and Zhijian Yao[1]*
[1]Nanjing Medical Univ., China, [2]Southeast Univ., China

[We-P084]

Cortical thickness, cortical and subcortical volume abnormalities in patients with anxious depression

Ke Zhao[1], Haiyan Liu[1], Rui Yan[1], Lingling Hua[1], Yu Chen[1], Jiabo Shi[1], Zhijian Yao[1]*, and Qing Lu[2]*
[1]Nanjing Medical Univ., China, [2]Southeast Univ., China

[We-P085]

Auditory steady-state gamma responses of MEG in children with typical development and those with autism spectrum disorders

Hidetoshi Takahashi[1]*, Atsuko Gunji[1,2,3], Yuu Kaneko[1], Naruhito Hironaga[4], Koichi Hagiwara[4], Masumi Inagaki[1], Shozo Tobimatsu[4], Takashi Hanakawa[1], and Yoko Kamio[1]
[1]Nat'l Center of Neurology and Psychiatry, Japan, [2]Yokohama Nat'l Univ., Japan, [3]Nat'l Inst. of Mental Health, Japan, [4]Kyushu Univ., Japan

[We-P086]

Spectral hypoconnectivity underlies perception of emotional faces in adolescent-onset borderline personality disorder

Benjamin Dunkley[1]*, J. Sato[1], Upsana Krishnadev[2], Rosalina Ceci[2], Marshall Korenblum[2], Helen O'Halpin[2], and Anthony Ruocco[3]

[1]The Hospital for Sick Children, Toronto, Canada, [2]Hincks-Dellcrest Centre, Canada. [3]Univ. of Toronto, Canada

[We-P087]

A multimodal investigation of inhibition in schizophrenia

Laura Whitlow*, Tom Freeman, James Walters, and Krish Singh

Cardiff Univ., UK

[We-P088]

Testing two neurobiological models of client speech during intervention sessions for alcohol use using MEG

Jon Houck* and Claudia Tesche

Univ. of New Mexico, USA

[We-P089]

Functional connectivity during auditory verbal hallucinations in schizophrenia patients

Jon Houck[1,2], Jessica Turner[2], Jeffrey Lewine[2], Charlotte Chaze[1,2], Vince Clark[1], Vince Calhoun[2], and Robert Thoma[3]

[1]Univ. of New Mexico, USA, [2]The Mind Research Network, USA, [3]Univ. of New Mexico Health Sciences Center, USA

[We-P090]

Machine-learning-based diagnosis of schizophrenia using combined sensor-level and source-level EEG features

Miseon Shim[1], Han-Jeong Hwang[2], Do-Won Kim[3], Seung-Hwan Lee[4], and Chang-Hwan Im[1]*

[1]Hanyang Univ., Korea, [2]Kumoh Nat'l Inst. of Techl;, Korea, [3]Technische Universität Berlin, Germany, [4]Inje Univ., Korea

[We-P091]

Neuromagnetic signatures of impaired cognitive control in schizophrenia

Matthew Hughes[1,2]*, William Woods[1,2], Patricia Michie[3], Neil Thomas[1], and Susan Rossell[1,2]

[1]Swinburne Univ. of Tech., Australia, [2]Australian Nat'l Imaging Facility, Australia, [3]Univ. of Newcastle, Australia

[We-P092]

MEG analysis of connectivity changes due to DBS in a single patient with OCD

Will Woods[1,2]*, David Castle[3,4], Mark Cook[3,4], James Olver[4], Hugh McDermott[5], Peter Bosnac[3,4], Peter McNeill[3], and Susan Rossell[1,6]

[1]Swinburne Univ. of Tech., Australia, [2]Australian Nat'l Imaging Facility, Australia, [3]St. Vincent`s Hospital Melbourne, Australia, [4]Univ. of Melbourne, Australia, [5]Bionics Inst., Australia, [6]MAPrc, Australia

[We-P093]

Revisiting the functional neuroanatomy of post-traumatic stress disorder: insights from meta-analysis and whole-brain connectomics

Marina Charquero-Ballester[1,2,3]*, Eloise A. Stark[1,2,3], Tim J. van Hartevelt[1,2,3], Christine E. Parsons[2,3], Joana R.B Cabral[1,4], Diego Vidaurre[1], Angus B.A Stevner[1,2], Mark W. Woolrich[1], Hugh McManners[1,3], Anke Ehlers[1], Alan Stein [1], and Morten L. Kringelbach[1,2,3]

[1]Univ. of Oxford, UK, [2]Aarhus Univ., Denmark, [3]The Queen`s College, UK, [4]Universitat Pompeu Fabra, Spain

[We-P094]

Magnetoencephalographical targets for measuring theory of mind deficits in schizophrenia

Sungwon Park[1]* and Kiwoong Kim[2]

[1]Hannam Univ., Korea, [2]KRISS, Korea

23 : Somatosensory processing

[We-P095]

Automatic inhibition function in the somatosensory and motor cortex: An MEG-MRS study

Chia-Hsiung Cheng[1,2]*, Shang-Yueh Tsai[3], and David M. Niddam[4]

[1]Chang Gung Univ., Taiwan, [2]Chang Gung Memorial Hospital, Taiwan, [3]Nat'l Chengchi Univ., Taiwan, [4]Nat'l Yang-Ming Univ., Taiwan

[We-P096]

Co-operation between S1 and S2 neuronal population is crucial for the high-frequency (> 100 Hz) vibrotaction

Seokyun Ryun[1], June Sic Kim[1]*, Hyeongrae Lee[1], and Chun Kee Chung[1,2]*

[1]Seoul Nat'l Univ., Korea, [2]Seoul Nat'l Univ. Hospital, Korea

[We-P097]

Somatomotor mapping in MEG

Eleanor Barratt, George O'Neill, Rosa Sanchez-Panchuelo, Susan Francis, and Matthew Brookes

Univ. of Nottingham, UK

[We-P098]

Evidence for a proprioceptive mismatch response: Distinctive responses to actual and predicted stimulation

Lau Møller Andersen[1], Veikko Jousmäki[1,2], and Daniel Lundqvist[1]

[1]Karolinska Institutet, Sweden, [2]Aalto Univ., Finland

[We-P099]

Positive and negative emotions affect the somatosensory cortex

Keita Tanaka[1]*, Mikiya Kobayashi[1], Sijiro Yasuda[1], Kazutomo Yunokuchi[2], Shinya Kuriki[1], and Yoshinori Uchikawa[1]

[1]Tokyo Denki Univ., Japan, [2]Kagoshima Univ., Japan

[We-P100]

MEG-compatible pneumatic movement actuator to study stretch-reflex of human plantar flexors

Harri Piitulainen[1]*, Santtu Seipäjärvi[2], Simon Walker[2], Janne Avela[2], Tiina Parviainen[1], and Veikko Jousmäki[1,2]

[1]Aalto Univ., Finland, [2]Univ. of Jyväskylä, Finland

[We-P101]

Affective touch in the brain: MEG recordings to pleasant touch using a novel brush robot

Elin Eriksson Hagberg[1]*, Veikko Jousmäki[2,3], Justin Schneiderman[4], Daniel Lundqvist[2], and Johan Wessberg[1]*
[1]Univ. of Gothenburg, Sweden, [2]Karolinska Institutet, Sweden, [3]Aalto Univ., Finland, [4]Sahlgrenska Academy and Univ. of Gothenburg, Sweden

[We-P102]

Inhibition in the somatosensory system – A neuro-pharmacological Magnetoencephalography (MEG) study

Christoph Braun[1,2]*, Chiara Fioravanti[1], Margherita Carboni[1], Cecilia Mazzetti[3], Diljit Singh Kajal[1], and Ulf Ziemann[1]*
[1]Univ. of Tübingen, Germany, [2]Univ. of Trento, Italy, [3]Radbound Univ., The Netherlands

[We-P103]

Declination of geomagnetic field acts as a positive geotactic modulator in the fruit fly

Kwon-Seok Chae[1]*, Ji-Eun Bae[1], Yong-Ho Lee[2], and In-Taek Oh[1]
[1]Kyungpook Nat'l Univ., Korea, [2]KRISS, Korea

[We-P104]

Somatosensory evoked magnetic fields in patients with free flap reconstruction of the tongue

Akitake Kanno[1]*, Satoko Koeda[2], Yosuke Kakisaka[1], Nobukazu Nakasato[1], Ryuta Kawashima[1], and Motoaki Sugiura[1]
[1]Tohoku Univ., Japan, [2]Tokyo Medical and Dental Univ., Japan

[We-P105]

Personal neglect and tactile extinction involve early deficit in bilateral tactile novelty detection at the secondary somatosensory cortex

Gilles Naeije*, Wens V., Marty B., Goldman S., and De Tiège X
Université Libre de Bruxelles, Belgium

[We-P106]

Neuromagnetic responses to tactile stimulation of the fingers: Evidence for reduced post-synaptic GABAergic inhibition in children with autism spectrum disorder and epilepsy

Michael Jurkiewicz[1], Sudha Kessler[2], Lisa Blaskey[2], Erin Schwartz[2], Tim Roberts[2], and William Gaetz[2]
[1]Hospital of the Univ. of Pennsylvania, USA, [2]Children`s Hospital of Philadelphia, USA

[We-P107]

Response gating in the somatosensory system: A MEG study of the spectro-temporal dynamics, functional connectivity, and developmental trajectory

Alex I Wiesman, Elizabeth Heinrichs-Graham, Nathan M Coolidge, James E Gehringer, Max J Kurz, and Tony W. Wilson*
Univ. of Nebraska Medical Center, USA

[We-P108]

Magnetoencephalographic study of neuromagnetic responses to vibrotactile stimulation

Min-Young Kim[1], Hyukchan Kwon[1], Won-Heyong Park[2], Tae-Heon Yang[1], Sang-Youn Kim[2], and Kiwoong Kim[1,3]
[1]KRISS, Korea, [2]Korea Univ. of Tech. and Education, Korea, [3]Univ. of Science and Tech., Korea

[We-P109]

Magnetoencephalographic study on cortical activity evoked by warm stimulation in human
Kyung-min An[1,2], Sanghyun Lim[1,2], Min-Young Kim[2], Hyukchan Kwon[2], Bakul Gohel[2], Ji-Eun Kim[1,2], and Kiwoong Kim[1,2]*
[1]Univ. of Science and Tech., Korea, [2]KRISS, Korea

[We-P110]

Proprioceptive stimulation in magnetoencephalographic recordings
Veikko Jousmäki[1,2]*
[1]Aalto Univ., Finland, [2]NatMEG, Karolinska Institutet, Sweden

24 : Ultra Low Field MRI

[We-P111]

A modular and field-tolerant ultra-low-noise multichannel SQUID system for ULF MR and high frequency MEG
Rainer Körber*, Jan-Hendrik Storm, Dietmar Drung, and Martin Burghoff*
Physikalisch-Technische Bundesanstalt, Germany

[We-P112]

Investigation of ultra-low field relaxation times of post-mortem pig brains and rotationally cross-linked proteinsin the laboratory frame and in the rotating frame
Hui Dong[1,2]*, Ben Inglis[1], Seong-Min Hwang[1,3], Michael Wendland[1], Lixing You[1,2], Ian Barr[1], and John Clarke[1]
[1]Univ. of California, Berkeley, USA, [2]Chinese Academy of Sciences, China, [3]KIST, Korea

[We-P113]

Neuronal current imaging (NCI) by Ultra-Low-Field MRI
Nora Höfner[1], Rainer Körber[1], Jens Haueisen[2], and Martin Burghoff[1]*
[1]Physikalisch-Technische Bundesanstalt, Germany, [2]TU Ilmenau, Germany

[We-P114]

ULF-MRI of in vivo human brain using inversion recovery to suppress magnetization of cerebrospinal fluid
Seong-min Hwang[1,2]*, Ben Inglis[1], Hui Dong[1,4], Lixing You[1,3], and John Clarke[1]*
[1]Univ. of California, Berkeley, USA, [2]KRISS, Korea, [3]Chinese Academy of Sciences, China

[We-P115]

Magnetization loops of type-II superconductors in SQUID-based ultra-low field nuclear magnetic resonance: A numerical study
Seong-min Hwang[1]*, Rainer Koerber[2], Kiwoong Kim[1]*, Kwon Kyu Yu[1], Seong-Joo Lee[1], Jeong-Hyun Shim[1], and Martin Burghoff[2]
[1]KRISS, Korea, [2]Physikalisch-Technische Bundesanstalt, Germany

[We-P116]

Ultra-low field MRI based on high-Tc SQUID and flux coupling
Shu-Hsien Liao, Pei-Che Wu, Jhih-Hao Chen, Jen-Jie Chieh, Hong-Chang Yang, and Herng-Er Horng
Nat'l Taiwan Normal Univ., Taiwan

[We-P117]

A data driven approach for artifacts rejection in very low field magnetic resonance images
Francesca Della Penna[1]*, Allegra Conti[1], Angelo Galante[2], Francesco De Pasquale[3], Vittorio Pizzella[1], Gian Luca Romani[1], and Stefania Della Penna[1]*
[1]Univ. "G. d`Annunzio" of Chieti-Pescara, Italy, [2]L`Aquila Univ., Italy, [3]Univ. of Teramo, Italy

[We-P118]

Optimized pipeline for 3D co-registration of low- and high-field MRI
Roberto Guidotti[1], Raffaele Sinibaldi[1], Cinzia De Luca[1], Allegra Conti[1], Risto J. Ilmoniemi[2], Koos C.J. Zevenhoven[2], Per E. Magnelind[3], Vittorio Pizzella[1], Gian Luca Romani[1], and Stefania Della Penna[1]
[1]Univ. of Chieti-Pescara, Italy, [2]Aalto Univ., Finland, [3]Los Alamos Nat'l Lab., USA

[We-P119]

Eliminating co-registration in MEG–MRI: automatic nonlinear calibration of ULF MRI
Antti J. Mäkinen*, Koos C. J. Zevenhoven*, and Risto J. Ilmoniemi
Aalto Univ., Finland

[We-P120]

Accurate mapping of magnetic fields generated by an ultra-low-field MRI device
Aino E. Tervo*, Antti J. Mäkinen, Risto J. Ilmoniemi, and Koos C. J. Zevenhoven*
Aalto Univ., Finland

[We-P121]

Nuclear magnetic resonance detection with an atomic magnetometer toward ultra low field magnetic resonance imaging with non-cryogenics
Hyunjoon Lee[1,2], Kiwoong Kim[1]*, Jeong Hyun Shim[1], and Seong-Joo Lee[1]
[1]KRISS, Korea, [2]Pusan Nat'l Univ., Korea

[We-P122]

Breaking the nonuniqueness barrier in electromagnetic neuroimaging: the BREAKBEN project
Risto Ilmoniemi[1]*, Jens Haueisen[2], Mikko Kiviranta[3], Rainer Körber[4], Jyrki Mäkelä[5], Jukka Nenonen[6], Gian Luca Romani[7], and Koos Zevenhoven[1]
[1]Aalto Univ., Finland, [2]Ilmenau Univ. of Tech., Germany, [3]VTT Technical Research Centre of Finland, Finland, [4]Physikalisch-Technische Bundesanstalt, Germany, [5]Helsinki Univ. Hospital, Finland, [6]Elekta Oy, Finland, [7]Univ. of Chieti-Pescara, Italy

[We-P123]

Recent advances in ultra-low-field MRI and its compatibility with other modalities
Koos C. J. Zevenhoven* and Risto J. Ilmoniemi
Aalto Univ., Finland

[We-P124]

Prepolarization coil design using ceramic aluminium nitride cooling disks for ultra-low field magnetic resonance systems with highly effective cooling and low thermal noise
Seong-min Hwang*, Jeong-Hyun Shim, Seong-Joo Lee, and Kiwoong Kim*
KRISS, Korea

25 : Visual Processing

[We-P125]

Spatio-temporal localization of predictive visual mechanisms using MEG
Patrick Johnston[1]*, J. Robinson[1], S. Johnson[2], M. Simpson[2], A. Young[2], and G. Green[2]
[1]QUT, Australia, [2]Univ. of York, UK

[We-P126]

Oscillatory correlates of the use of world knowledge in predictive models for the perception of causal events
Stan van Pelt*, Lieke Heil, Johan Kwisthout, Iris van Rooij, and Harold Bekkering
Radboud Univ., The Netherlands

[We-P127]

Frequency-resolved directed neural interactions support expectation and detection of visual target stimuli
Jan Kujala[1]*, Alard Roebroeck[2], and Riitta Salmelin[1]
[1]Aalto Univ., Finland, [2]Univ. of Maastricht, The Netherlands

[We-P128]

The visual gamma response to faces reflects the presence of sensory evidence not awareness
Gavin Perry
Cardiff Univ., UK

[We-P129]

Visual system traces temporal evolution of band-limited quasi-rhythmic stimulation
Christian Keitel*, Gregor Thut, and Joachim Gross
Univ. of Glasgow, UK

[We-P130]

Visual gamma frequency reflects behavioral differences in visual sensitivity
Elena Orekhova[1,2]*, Justin Schneiderman[1], Sebastian Lundström[1], Bushra Riaz[1], Saideh Rajaei[1], Nouchine Hadjikhani[1,3], Olga Sysoeva[2], Tatiana Stroganova[2], and Christopher Gillberg[1]
[1]Univ. of Gothenburg, Sweden, [2]Moscow State Univ. of Psychology and Education, Russia, [3]Harvard Medical School, USA

[We-P131]

Neural temporal dynamic of global/local visual processing: A MEG study
Ling Liu and Huan Luo*
Peking Univ., China

[We-P132]

Parietal gamma-band activity reflects individual performance in the 3-D mental rotation
Sunao Iwaki*
AIST, Japan

[We-P133]

Visual gamma oscillations across the UK: Comparability of UK MEG Partnership data recorded with different MEG scanners

Lorenzo Magazzini[1]*, Michael Hall[2], Bethany Routley[1], Benjamin Hunt[3], Kevin Prinsloo[4], Sofie S. Meyer[5], Simone Heideman[6], Rebecca Beresford[7,8], Ioannis Papanikolaou[9], Gareth R. Barnes[5], Matthew Brookes[3], Paul Furlong[2], Gary Green[9], Joachim Gross[4], Khalid Hamandi[1], Richard Henson[7,8], Vladimir Litvak[5], Kia Nobre[6], Mark Woolrich[6], and Krish Singh[1]*

[1]Cardiff Univ., UK, [2]Aston Univ., UK, [3]Univ. of Nottingham, UK, [4]Univ. of Glasgow, UK, [5]Univ. College London, UK, [6]Univ. of Oxford, UK, [7]Univ. of Cambridge, UK, [8]MRC Cognition and Brain Sciences Unit, UK, [9]Univ. of York, UK

[We-P134]

Saccadic eye movements are phase-locked to posterior alpha oscillations during successful memory formation – evidence from MEG and intracranial data

Tobias Staudigl[1]*, Elisabeth Hartl[2], Soheyl Noachtar[2], Christian F. Doeller[1], and Ole Jensen[1]

[1]Radbound Univ., The Netherlands, [2]Univ. of Munich, Germany

[We-P135]

A simultaneous EEG/MEG study for stereoscopic depth perception

Hohyun Cho[1], Min-Koo Kang[2], Sangtae Ahn[1], Moonyoung Kwon[1], Jinyoung Choi[1], Kiwoong Kimm[3,4], and Sung Chan Jun[1]*

[1]GIST, Korea, [2]KIST, Korea, [3]KRISS, Korea, [4]Univ. of Science and Tech., Korea

[We-P136]

Face-selective neuromagnetic responses to fast periodic presentation of natural images

Wei He[1]*, Bruno Rossion[2], and Blake Johnson[1]

[1]Macquarie Univ., Australia, [2]Univ. of Louvain, Belgium

[We-P137]

Evoked and induced responses to oriented contrast edges share a common representational structure

Sheng Qin[1], Mingtong Fang[1], Yalda Mohsenzadeh[1], Quanzheng Li[2], Radoslaw Cichy[1,3], and Dimitrios Pantazis[1]

[1]MIT, USA, [2]Harvard Medical School, USA, [3]Free Univ. Berlin, Germany

[We-P138]

Temporal dynamics of face identity and eye gaze recognition revealed by pattern analysis of MEG signals

Jingkai Chen[1], Yalda Mohsenzadeh[1], Jing Li[1], Quanzheng Li[2], Radoslaw Cichy[1,3], and Dimitrios Pantazis[1]

[1]MIT, USA, [2]Harvard Medical School, USA, [3]Free Univ. Berlin, Germany

[We-P139]

FEF-controlled alpha delay activity predicts stimulus-induced gamma band activity in visual cortex

Tzvetan Popov[1,2], Sabine Kastner[3,4], and Ole Jensen[2]

[1]Univ. of Konstanz, Germany, [2]Donders Inst. for Brain, The Netherlands, [3]Princeton Neuroscience Inst., USA, [4]Princeton Univ., USA

[We-P140]

Adaptation of sustained visual gamma oscillations to moving annular grating stimuli, at 4 temporal frequencies of movement, using MEG

Rachael Stickland*, Laura Smith, Gavin Perry, Krishna Singh, and Richard Wise
Cardiff Univ., UK

[We-P141]

High-frequency retinal rhythms drive corresponding activity in visual cort

Sarang S. Dalal[1,2]*, Mathis Kaiser[2], Britta Westner[2], and Tzvetan Popov[2,3]*
[1]Aarhus Univ., Denmark, [2]Univ. of Konstanz, Germany, [3]Radboud Univ., The Netherlands

[We-P142]

Neurodynamics and connectivity during compound threat cue perception

Cody Cushing[1]*, Reginald Adams, Jr.[2], Hee Yeon Im[1,3], Noreen Ward[1], and Kestutis Kveraga[1,3]
[1]Massachusetts General Hospital, USA, [2]The Pennsylvania State Univ., USA, [3]Harvard Medical School, USA

[We-P143]

Real time retinotopic mapping of primary visual cortex in MEG

Nicholas A Peatfield*, Alex Moiseev, Urs Ribrary, Sam Doesburg, and Teresa Cheung
Simon Fraser Univ., Canada

[We-P144]

Neural dynamics underlying reading of crowd emotion

Hee Yeon Im[1,2], Cody Cushing[1], Reginald Adams, Jr.[3], and Kestutis Kveraga[1,2]
[1]General Hospital, USA, [2]Harvard Medical School, USA, [3]The Pennsylvania State Univ., USA

[We-P145]

Temporal variability along the visual pathway during face processing

Jo-Fu Lotus Lin[1]*, Chih-Che Chou[2], Wen-Jui Kuo[3], and Fa-Hsuan Lin[1]
[1]Nat'l Taiwan Univ., Taiwan, [2]Taipei Veterans General Hospital, Taiwan, [3]Nat'l Yang Ming Univ., Taiwan

[We-P146]

The sex differences in brain activity of processing emotional faces in early processes

Shih-Tseng Huang[1]*, Ming-Chun Lee[1], Pei-Shu Tsai[2], Ovid J.-L. Tzeng[3,4], Daisy L. Hung[3,5], and Denise H. Wu[5]
[1]Nat'l Chung-Cheng Univ., Taiwan, [2]Nat'l Changhua Univ. of Edu., Taiwan, [3]Nat'l Yang-Ming Univ., Taiwan, [4]The Inst. of Linguistics, Academia Sinica, Taiwan, [5]Nat'l Central Univ., Taiwan

[We-P147]

Study of MEG measurements of the visual evoked magnetic fields for arithmetic logic formula response

Yan-Cheng Chan[1,2], Shiannfong Huang[1]*, Zhe-Yu Li[1,3], Shu-Hsien Liao[2], Michelle Liou[4], and Arthur C. Tsai[4]
[1]Oriental Inst. of Tech., Taiwan, [2]Nat'l Taiwan Normal Univ., Taiwan, [3]Nat'l Yunlin Univ. of Science and Tech., Taiwan, [4]Inst. of Statistical Science, Academia Sinica, Taiwan

[We-P148]

How far does visual frequency tagging above 60 Hztravel?

Jim Herring[1]*, Jerome Herpers[1], Til Bergmann[2], and Ole Jensen[1]
[1]Radboud Univ., The Netherlands, [2]Univ. of Tübingen, Germany

[We-P149]

Dynamics and properties of mental models of spinning 3D objects: an M/EEG study

Clement (Jean Benoit) Moutard[1,2,3]* and Stanislas Dehaene[1,2,3,4]
[1]INSERM, France, [2]Commissariat à l'Energie Atomique, France, [3]Université Paris-Sud, France, [4]College de France, France