

Poster Session I

Monday, October 3

1 : Analysis Toolbox

[Mo-P001]

Rhythmic entrainment source separation: Optimizing spectral and temporal analyses of narrow-band neural responses to rhythmic sensory stimulationMichael X Cohen¹ and Rasa Gulbinaite²¹Radboud Univ., The Netherlands, ²Centre de Recherche Cerveau & Cognition, France

[Mo-P002]

MEG and EEG data processing using MNE-PythonAlexandre Gramfort^{1*}, Denis Engemann², Eric Larson³, Mainak Jas¹, Teon Brooks⁴, Jaakko Leppakangas¹, Marijn van Vliet⁵, Christian Brodbeck⁴, Mark Wronkiewicz³, Daniel Strohmeier⁶, Jona Sassenhagen⁷, Jean Remi King⁴, Chris Holdgraf⁸, Romain Trachel⁹, Yousra Bekhti¹, Federico Raimondo¹⁰, Lauri Parkkonen¹¹, and Matti Hamalainen¹²
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[Mo-P003]

Welcome to NeuroPype: A python-based pipeline for advanced MEG and EEG connectivity analysesDavid Meunier¹, Annalisa Pascarella^{2*}, Daphne Bertrand-Dubois³, Lajnef Tarek³, Etienne Combrisson^{1,3,4}, Dmitrii Altukhov⁵, and Karim Jerbi³¹Univ. Claude-Bernard Lyon1, France, ²CNR - IAC, Italy, ³Univ. of Montreal, Canada, ⁴Univ. Lyon1, France, ⁵Moscow State Univ. of Psychology and Education, Russia

[Mo-P004]

The HMM-MAR toolbox for the detection of quasi-stationary states of brain activity

Diego Vidaurre*, Andrew Quinn, and Mark Woolrich

Oxford Centre for Human Brain Activity, UK

[Mo-P005]

COMETS2: A MATLAB toolbox for numerical simulation of electric fields generated by transcranial direct current stimulation

Chany Lee, Sangjun Lee, and Chang-Hwan Im*

Hanyang Univ., Korea

[Mo-P006]

NeuroCUDE: An easy-to-use python software for neuronal current dipoles estimation from MEG/EEG data

Sara Sommariva*, Gianvittorio Luria, and Alberto Sorrentino

Univ. of Genova, Italy

[Mo-P007]

Advances in online MEG/EEG data processing with MNE-CPPLorenz Esch^{1,2*}, Christoph Dinh^{1,2*}, Limin Sun², Daniel Strohmeier¹, Daniel Baumgarten^{1,3}, Yoshio Okada², Matti Hämäläinen², and Jens Haueisen^{1,4}¹TU Ilmenau, Germany, ²Harvard Medical School, USA, ³Univ. of Health Sciences, Medical Informatics and Tech., Austria, ⁴Univ. Hospital Jena, Germany

[Mo-P008]

MNE-HCP software for processing the human connectome project MEG data in python

Denis Engemann^{1*}, Jona Sassenhagen², Mainak Jas³, Eric Larson⁴, Lauri Parkkonen⁵, Matti Hämäläinen⁶, Danilo Bzdok⁷, Alexandre Gramfort³, and Virginie van Wassenhove¹

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[Mo-P009]

Comparison between Hosaka-Cohen transformation and 2D source imaging in MCG study

Yuki Hasegawa^{1*}, Kensuke Sekihara^{1*}, Yasuhiro Shirai¹, Taishi Watanabe^{1,2}, Yoshiaki Adachi³, Kenzo Hirao¹, and Shigenori Kawabata¹

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[Mo-P010]

DSP toolbox for real time MEG data analysis in source space

Alexander Moiseev, Nicholas Peatfield, Sam Doesburg, Teresa P. L. Cheung, and Urs Ribary
Simon Fraser Univ., Canada

[Mo-P011]

An MEG extension to BIDS: Brain imaging data structure - a solution to organize, describe and share neuroimaging data

Guiomar Niso^{1*}, Jeremy Moreau¹, Elizabeth Bock¹, Francois Tadel¹, Robert Oostenveld², Jan-Mathijs Schoffelen², Alexandre Gramfort³, Krzysztof J. Gorgolewski⁴, and Sylvain Baillet¹

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[Mo-P012]

MEG pipelines for the analysis of resting state data in the Human Connectome Project (HCP)

Francesco Di Pompeo¹, Georgios Michalareas², Laura Marzetti¹, Jan Mathijs Schoffelen³, Linda J. Larson-Prior⁴, Fred W. Prior⁴, Matt Kelsey⁵, Tracy Nolan⁴, Francesco de Pasquale^{1,6}, Abbas Babajani-Feremi⁷, Pascal Fries², Vittorio Pizzella¹, Gian Luca Romani¹, Maurizio Corbetta^{8,9}, Abraham Z. Snyder⁹, Robert Oostenveld³, and Stefania Della Penna¹

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2 : Artifacts detection & correction

[Mo-P013]

Automated rejection and repair of bad trials in MEG/EEG

Mainak Jas^{1*}, Denis Engemann^{2,3,4}, Federico Raimondo⁵, Yousra Bekhti¹, and Alexandre Gramfort¹

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[Mo-P014]**Is it really the hippocampus?**Sofie Meyer^{1*}, Daniel Bush¹, James Bisby¹, Aiden Horner^{1,2}, Neil Burgess¹, and Gareth Barnes¹¹Univ. College London, UK, ²Univ. of York, UK**[Mo-P015]****Extended signal space separation for improved interference suppression**Liisa Helle^{1,2*}, Jukka Nenonen², Lauri Parkkonen^{1,2}, and Samu Taulu³¹Aalto Univ., Finland, ²Elekta Oy, Finland, ³Univ. of Washington, USA**[Mo-P016]****Time-domain signal subspace**Kensuke Sekihara^{1,2*} and Srikantan Nagarajan^{3*}¹Tokyo Medical and Dental Univ., Japan, ²Signal Analysis Inc, Japan, ³Univ. of California, San Francisco, USA**[Mo-P017]****Determining the importance of compensating for head movements during MEG acquisition across different age groups**

Eric Larson and Samu Taulu*

Univ. of Washington, USA

[Mo-P018]**Reducing noise in electromagnetic sensor arrays using oversampled temporal projection**

Eric Larson and Samu Taulu*

Univ. of Washington, USA

[Mo-P019]**A fingerprint method for the automatic removal of physiological artefacts from EEG recordings**Lorenzo Schinaia^{1,2}, Gabriella Tamburro¹, Patrique Fiedler^{2,3}, Jonas Chatel-Goldman¹, Jens Haueisen^{3,4}, and Silvia Comani^{1,2*}¹Univ. "G. d'Annunzio" Pescara-Chieti, Italy, ²Casa di Cura Privata Villa Serena, Italy, ³TU Ilmenau, Germany, ⁴Univ. Hospital Jena, Germany**[Mo-P020]****Detection and reduction of mechanical vibration-induced interference in MEG**Zhaowei Liu¹, Wentian Cao¹, Petteri Laine², Veikko Jousmäki³, Jukka Nenonen², and Jia-Hong Gao¹¹Peking Univ., China, ²Elekta Oy, Finland, ³Aalto Univ., Finland**3 : Attention, Consciousness and Executive Function****[Mo-P021]****Characterizing brain vital sign responses with magneto- and electro- encephalography**Sujoy Ghosh Hajra¹, Careesa Liu¹, Ryan D'Arcy^{1,2}, Shaun Fickling¹, Xiaowei Song^{1,2}, and Teresa Cheung^{1,2}¹Simon Fraser Univ., Canada, ²Fraser Health Authority, Canada

[Mo-P022]

Blink-related oscillations as indicators of awareness: Initial characterization using MEG

Careesa Liu^{1*}, Sujoy Ghosh Hajra¹, Teresa Cheung^{1,2}, Xiaowei Song^{1,2}, and Ryan D'Arcy^{1,2}

¹Simon Fraser Univ., Canada, ²Fraser Health Authority, Canada

[Mo-P023]

Novel sounds modulate oscillatory activity in visual cortex - the neural basis of behavioral distraction?

Annekathrin Weise^{1*}, Thomas Hartmann², Erich Schröger¹, Nathan Weisz², and Philipp Ruhnau^{2,3}

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[Mo-P024]

Using M-EEG to investigate pupillometry as a biomarker

Eric Larson and Adrian K. C. Lee*

Univ. of Washington, USA

[Mo-P025]

Switching between temporal and spatial attention in older adults: An investigation into age-related changes in underlying neural mechanisms

Eleanor Callaghan*, Carol Holland, and Klaus Kessler*

Aston Univ., UK

[Mo-P026]

Spatiotemporal expectations in complex sequences

Simone (Gerdien) Heideman*, Freek van Ede, and Anna (Christina) Nobre

Univ. of Oxford, UK

[Mo-P027]

Selectivity of tactile attention: an MEG study

Tetsuo Kida*, Emi Tanaka, and Ryusuke Kakigi

Nat'l Inst. for Physiological Sciences, Japan

[Mo-P028]

Delayed middle latency auditory evoked response during propofol-induced loss of consciousness

Seung-Hyun Jin^{1*}, Essie Pae², and Chun Kee Chung^{1,3}

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[Mo-P029]

See the touch of the sound: Common signatures of conscious access across sensory modalities

Gaëtan Sanchez^{1*}, Julia Frey¹, Marco Fusca², and Nathan Weisz¹

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[Mo-P030]

Temporal and spatial differences in the theory of mind network in children with and without autism spectrum disorder

Veronica Yuk^{1,2*}, Charline Urbain^{1,3}, and Margot J. Taylor^{1,2}

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[Mo-P031]

Inhibitory alpha activity mediates rhythmic sampling of visual objects

Jianrong Jia, Fang Fang, and Huan Luo*

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[Mo-P032]

Modulation of visual gamma oscillations by selective spatial attention

Lorenzo Magazzini* and Krish Singh

Cardiff Univ., UK

[Mo-P033]

Modulations of alpha power during encoding mediate posterior alpha activity during working memory retention

Thomas Kuster¹, Tzvetan Popov^{1*}, Gregory A. Miller², and Brigitte Rockstroh¹

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[Mo-P034]

Alpha band functional connectivity supports successful active inhibition associated with selective attention

Antea D'Andrea¹, Federico Chella¹, Tom R. Marshall², Vittorio Pizzella¹, Gian Luca Romani¹, Ole Jensen³, and Laura Marzetti^{1*}

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[Mo-P035]

Integration across different spatial reference frames

Evelyn Muschter*, Elisa Leonardelli, Nicholas Peatfield, and David Melcher

CIMEC, Center for Mind, Italy

[Mo-P036]

The Theory of Mind network: brain connectivity patterns underlying ToM processing in adults

Simeon M Wong^{1*}, Sarah Mossad^{1,2}, and Margot J Taylor^{1,2*}

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[Mo-P037]

Electromagnetic functional connectivity underlying anaesthetic-induced reductions in consciousness

Levin Kuhlmann^{1*}, Andria Pelentritou¹, Will Woods¹, John Cormack², Sarah Kondogiannis², Jamie Sleight³, and David Liley¹

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[Mo-P038]

P1 and traveling alpha waves in the MEG

Elie El Rassi*, Wolfgang Klimesch*, Walter Gruber, and Nathan Weisz
Universität Salzburg, Austria

[Mo-P039] Withdrawn

[Mo-P040]

When the brain changes its mind: oscillatory dynamics of conflict processing and response switching in a flanker task

Lauren Beaton¹, Sheeva Azma², and Ksenija Marinkovic^{1,3*}
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[Mo-P041]

Transient modulation of neural responses to heartbeats reflects bodily self-consciousness

Hyeong-dong Park, Fosco Bernasconi, Javier Bello-Ruiz, Christian Pfeiffer, Roy Salomon, and Olaf Blanke*
EPFL, Switzerland

[Mo-P042]

The spatio-temporal dynamics of 'Theory of Mind' in school age children born very preterm

Sarah Mossad^{1,2,3*}, Mary Lou Smith^{1,2,3}, and Margot Taylor^{1,2,3*}
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[Mo-P043]

MEG correlates of internalization of social influence

Aleksei Gorin^{1*}, Ivan Zubarev², Anna Shestakova¹, Alexey Ossadtchi^{1,3}, and Vasily Klucharev¹
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[Mo-P044]

Neural and pupil diameter effects of mental fatigue

Yalda Mohsenzadeh¹, Konstantinos Michmizos², Dimitris Metaxas², and Dimitrios Pantazis¹
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[Mo-P045]

Spectro-temporal and functional connectivity dynamics of visuospatial attention

Alex I. Wiesman, Elizabeth Heinrichs-Graham, Amy L. Proskovec, Timothy J. McDermott, and Tony W. Wilson*
Univ. of Nebraska Medical Center, USA

[Mo-P046]

Temporal expectation biases duration judgment

Tadeusz Kononowicz^{1,2} and Virginie van Wassenhove^{1,2*}
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[Mo-P047]**Stimulus driven and mechanistic neurodynamics of inhibitory control**Elie El Rassi¹, Nicholas Peatfield^{2*}, and Nathan Weisz^{1,3,4}¹Universität Salzburg, Austria, ²Simon Fraser Univ., Canada, ³Center for Mind, Canada, ⁴Univ. of Trento, Italy**[Mo-P048]****Alpha-band phase synchrony connects frontal, parietal and visual cortices during anticipatory visuospatial attention**

Muriel Lobier*, J. Matias Palva, and Satu Palva

Univ. of Helsinki, Finland

[Mo-P049]**Attentional modulation of response inhibition in a Go/No-Go task: spatio-temporal oscillatory dynamics in an anatomically constrained MEG model**Joseph P. Happer^{1*}, Laura C. Wagner¹, Lauren E. Beaton¹, Lee A. Holcomb¹, and Ksenija Marinkovic^{1,2}¹San Diego State Univ., USA, ²Univ. of California, San Diego, USA**[Mo-P050]****Oscillatory dynamics in the dorsal and ventral attention systems during the reorienting of attention**Amy L. Proskovec^{1,2}, Elizabeth Heinrichs-Graham², Timothy J. McDermott², and Tony W. Wilson^{1,2*}¹Univ. of Nebraska, USA, ²Univ. of Nebraska Medical Center, USA**[Mo-P051]****Cortical oscillations accompanying cognitive control in a response switching task using incidental learning**Silvia Isabella¹, Charline Urbain¹, J. Allan Cheyne², and Douglas Cheyne¹¹The Hospital for Sick Children, Canada, ²Univ. of Waterloo, Canada**[Mo-P052]****Comparison study of Attention Network Test between healthy control and schizophrenia using Magnetoencephalography**Ji Eun Kim^{1,2*}, Min Young Kim¹, Seung Jun Kim³, Ji Sun Yang³, Hyukchan Kwon¹, Ki Woong Kim^{1,2*}, and Bakul Gohel¹¹KRISS, Korea, ²Univ. of Science and Tech., Korea, ³Konyang Univ. Hospital, Korea**[Mo-P053]****Modulation of induced positive mood on inhibitory control: an MEG study**Yu-Mei Chang^{1*}, Chuan-Tao Wang^{1,2}, Jia-Ren Chang³, Chiu-Jung Huang², Yong-Sheng Chen³, and Li-Fen Chen^{1,2*}¹Nat'l Yang-Ming Univ., Taiwan, ²Taipei Veterans General Hospital, Taiwan, ³Nat'l Chiao Tung Univ., Taiwan**[Mo-P054]****Changes in multifractal brain dynamics between consciousness and anesthetic-induced unconsciousness**Thomas Thiery^{1*}, Tarek Lajnef^{1,2}, Etienne Combrisson^{1,3,4}, Younes Zerouali⁵, Georges A. Mashour⁶, Stefanie Blain-Moraes⁷, and Karim Jerbi^{1*}¹Univ. of Montreal, Canada, ²Univ. of Sfax, Tunisia, ³INSERM, France, ⁴Université Lyon1, France, ⁵CHUM Notre-Dame, Canada, ⁶Univ. of Michigan, USA, ⁷McGill Univ., Canada

[Mo-P055]

Neural correlates of mental flexibility in typically developing children

Alexandra Mogadam^{1,2*}, Anne Keller², Amanda Robertson², Margot Taylor^{1,2,3}, Jason Lerch^{1,2,3}, Evdokia Anagnostou^{1,2,3,4}, and Elizabeth Pang^{1,2,3}

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[Mo-P056]

Greater desynchronization of upper alpha during improvisational music performance planning

Jared Boasen^{1*}, Yuya Takeshita^{1*}, Jousmäki Veikko², and Koichi Yokosawa¹

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4 : Auditory Processing

[Mo-P057]

An MEG investigation of the brain dynamics mediating focused-attention and open-monitoring meditation

Daphné Bertrand-Dubois^{1*}, David Meunier², Annalisa Pascarella³, Tarek Lajnef¹, Vittorio Pizzella⁴, Laura Marzetti⁴, and Karim Jerbi¹

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[Mo-P058]

Auditory evoked fields elicited by frequency-modulated sweeps

Hidehiko Okamoto^{1,2*} and Ryusuke Kakigi^{1,2}

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[Mo-P059]

Proof that syllables are the basic unit of aural comprehension

Minoru Hayashi*

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[Mo-P060]

Prestimulus pathways of frontal control during sensory gating

David Schubring^{1*}, Brigitte Rockstroh¹, Gregory A. Miller², and Tzvetan Popov¹

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[Mo-P061]

Bistable perception in auditory streaming is paralleled by altered evoked brain rhythms and connectivity patterns along the ventral stream

Damiano Azzalini¹, Philipp Ruhnau², Sabine Leske³, and Nathan Weisz^{2,4*}

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[Mo-P062]

Audio-visual processing of Chinese characters and speech sounds

Weiyong Xu, Orsolya Kolozsvari, Praghajieeth Santhana Gopalan, Paavo Leppänen, and Jarmo Hämäläinen

Univ. of Jyväskylä, Finland

[Mo-P063]

Fronto-temporal connectivity shows whether 'Twinkle Twinkle Little Star' song is in the music or not

Chan Hee Kim¹, Chun Kee Chung^{1,2*}, Jaeho Seol³, and Seung-Hyun Jin³

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[Mo-P064]

Connectivity from the left to the right hemisphere in frontotemporal areas processes independently syntactic violation and task complexity in harmonies

Chan Hee Kim¹, Chun Kee Chung^{1,2*}, Seung-Hyun Jin³, and June Sic Kim¹

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[Mo-P065]

Inter-subject correlation during music listening reflects musical expertise

Anja Thiede^{1,2*}, Emma Suppanen¹, Elvira Brattico^{1,3}, and Lauri Parkkonen²

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[Mo-P066]

Appearance of the 8-10 Hz temporal-lobe tau rhythm during drowsiness

Yui Murakami^{1,2}, Hiroaki Sato², Kaori Tamada², Elina Pihko³, Riitta Hari³, and Koichi Yokosawa²

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[Mo-P067]

Subject-specific dynamics of auditory cortex determined through MEG measurements and computational modelling

Aida Hajizadeh*, Patrick J.C. May, Reinhard König, and Artur Matysiak

Leibniz Inst. for Neurobiology Magdeburg, Germany

[Mo-P068]

The cerebellum is involved in learning delayed action effects: A TMS-MEG study

Liyu Cao*, Domenica Veniero, Gregor Thut, and Joachim Gross

Univ. of Glasgow, UK

[Mo-P069]

Auditory delta-entrainment interacts with multiple fronto-parietal networks

Anne Keitel*, Joachim Gross, and Christoph Kayser*

Univ. of Glasgow, UK

[Mo-P070]

Prediction of optimal auditory signals for visually-challenged people using auditory evoked magnetic responses

Yoshiharu Soeta and Seiji Nakagawa

AIST, Japan

[Mo-P071]

Inter-regional phase-amplitude coupling between inferior frontal gyrus and auditory cortex predicts near threshold pitch discrimination performance

Soheila Samiee^{1*}, Esther Florin², Dominique Vuvan³, Philippe Albouy¹, Isabelle Peretz³, and Sylvain Baillet¹
¹McGill Univ., Canada, ²Heinrich Heine Univ., Germany, ³Université de Montréal, Canada

[Mo-P072]

Investigation of perception of ambiguous melodies using ASSR's in MEG

Ryosuke Yuhara* and Iku Nemoto*
Tokyo Denki Univ., Japan

[Mo-P073]

A simultaneous MEG/EEG study for affective words with affective voice tone

Moonyoung Kwon¹, Hohyun Cho¹, Sangtae Ahn¹, Kiwoong Kim^{2,3}, and Sung Chan Jun^{1*}
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[Mo-P074]

Using the auditory steady state response to examine atypical oscillatory synchrony in individuals with down syndrome

Tahira Tejpar¹, Angela Wen², Careesa C. Liu¹, Vasily Vakorin¹, Daniel Bosnyak³, Diana Harasym⁴, Ryan C. N. D'Arcy^{1,5}, Larry E. Roberts³, Sam M. Doesburg^{1,6}, and Teresa P. L. Cheung^{1,5}
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[Mo-P075]

Being first matters: representational similarity analysis on ERP scalp maps reveals separate networks for audiovisual temporal integration depending on the leading sense

Roberto Cecere^{1*}, Joachim Gross¹, Ashleigh Willis^{1,2}, and Gregor Thut^{1*}
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[Mo-P076]

Effects of phonetic context on categorical perception of stop-consonants investigated with magnetoencephalography

Christian Altmann*, Daiki Yamasaki, Ryuhei Ueda, Masao Matsushashi, Tatsuya Mima, and Hidenao Fukuyama
Kyoto Univ., Japan

[Mo-P077]

Low frequency oscillations mediate de-multiplexing and encoding mechanisms during speech pre-processing

Mikel Lizarazu^{1*}, Maire Lallier¹, Mathieu Bourguignon¹, Manuel Carreiras^{1,2}, and Nicola Molinaro^{1,2}
¹Basque Center on Cognition, Brain & Language., Spain, ²Basque Foundation for Science, Spain

[Mo-P078]

Neural entrainment to speech edges in dyslexia: an MEG study

Asier Zarraga¹, Mikel Lizarazu¹, Marie Lallier¹, Mathieu Bourguignon¹, Manuel Carreiras^{1,2}, and Nicola Molinaro^{1,2}
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[Mo-P079]

Mechanisms of bone-conducted ultrasonic perception in the profoundly hearing-impaired assessed by MEG and EEG

Seiji Nakagawa^{1,2*}

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[Mo-P080]

Auditory steady-state response modulated by stimuli inducing octave illusion

Soitiro Shokei*, Hiroki Kurasaki, Soitiro Shokei, and Shinya Kuriki

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[Mo-P081]

Evaluation of auditory impressions of HVAC sound based on time-frequency representation of magnetic cortical activity

Hajime Yano^{1,2*}, Tetsuya Takiguchi^{1*}, Yasuo Arikawa¹, Takuya Hotehama², Masaru Kamiya³, and Seiji Nakagawa^{2,4}

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[Mo-P082]

Spatiotemporal characteristics of auditory activation in children with typical and atypical (SLI) language development

Sam van Bijnen^{1*}, Päivi Helenius², and Tiina Parviainen^{1*}

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[Mo-P083]

Cross-sensory recalibration of audiovisual spatial information during long-term adaptation to left-right reversed audition

Atsushi Aoyama^{1*} and Shinya Kuriki²

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[Mo-P084]

Lateralization and attentional modulation for auditory processing of language in children with specific language impairment

Doris Hernandez^{1*}, Terhi Tulonen¹, Päivi Helenius², Riita Salmelin³, and Tiina Parviainen¹

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[Mo-P085]

Differentiating mispredicted-predicted and unpredicted-predicted transitions in human auditory cortex using magnetoencephalography (MEG)

Yi-Fang Hsu^{1*}, Florian Waszak^{2,3}, and Jarmo Hämäläinen⁴

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[Mo-P086]

Neural encoding of vocal emotion in multivariate spatiotemporal MEG patterns

Caroline M. Whiting¹, Bruno L. Giordano¹, Pascal Belin², and Joachim Gross¹

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5 : Computational Neuroscience

[Mo-P087]

Neuro-computational modelling of lexico-syntactic representation and integration during speech comprehension

Hun S. Choi*, Billi Randall, Barry J. Devereux, and Lorraine K. Tyler
Univ. of Cambridge, UK

[Mo-P088]

Differential profile of individualized cortical-subcortical grey matter connectome in Schizophrenia

Je-Yeon Yun*
Seoul Nat'l Univ. Hospital, Korea

[Mo-P089]

Metastability and transient dynamics in a large-scale biophysical network

Romesh Abey Suriya^{1*}, Jonathan Hadida^{1,2}, Saad Jbabdi², Stamatios Sotiropoulos², and Mark Woolrich^{1,2}
¹Oxford Centre for Human Brain Activity, UK, ²Oxford Centre for Functional MRI of the Brain, UK

[Mo-P090]

Feature analyses of brain magnetic fields associated with discrimination of imagined speech using complex wavelet transformation

Shihomi Uzawa^{1,2*}, Tetsuya Takiguchi¹, Yasuo Arika¹, and Seiji Nakagawa^{2,3}
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[Mo-P091]

Subthreshold fluctuations under parametrically varying levels of uncertainty - an MEG study

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[Mo-P092]

A computational model of transcranial magnetic stimulation – activation of layer 5 pyramidal neurons

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[Mo-P093]

Study on the brain functional network core following magnetic stimulation of WaiGuan(SJ5) acupoint based on Electroencephalogram

Ling-Di Fu*, Gui-Zhi Xu, Hong-Li Yu, Miao-Miao Guo, and Ning Yin
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6 : BCI / BMI and Decoding

[Mo-P094]

EEG classification for motor imagery BCI using hierarchical features extraction

Muhammad Naveed Iqbal Qureshi and Boreom Lee*
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[Mo-P095]

Neural mechanism of the motor system during reaching movements

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[Mo-P096]

Tracking emotional face perception in space and time using MEG-based classification

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[Mo-P097]

Decoding MEG using classification on Riemannian Manifolds

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[Mo-P098]

Intra- and inter-subject classification of motor imagery MEG signals

Hanna Halme* and Lauri Parkkonen*

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[Mo-P099]

Emotional states decoding during watching movies from multimodal neurophysiological signals

Jeong Woo Choi, Hyun Kim, Jong Doo Choi, and Kyung Hwan Kim*

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[Mo-P100]

A Gaussian Mixture Model -based method for extracting feedback-related MEG responses for brain-computer interfaces

Ivan Zubarev* and Lauri Parkkonen

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[Mo-P101]

Optimization of non-linear permutation entropy features for EEG-based biometrics

Jae-hwan Kang and Sung-Phil Kim*

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[Mo-P102]

Evaluating the performance of electrocorticographic microelectrodes for syllable decoding

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7 : Brain Development

[Mo-P103]

Neural oscillations in the temporal pole for an audio-visual speech matching task reflect late neuronal maturation in adolescence

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[Mo-P104]

Impact of very preterm birth on the structural and functional neural correlates of emotion regulation at school age

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[Mo-P105]

Alterations in resting MEG spectral power in infants prenatally exposed to alcohol

Julia M Stephen^{1*}, Lucinda Flynn¹, Christopher Clifford¹, Danielle Kabella¹, Sandra Cano², Laura Garrison², Jean Lowe², and Ludmila Bakhireva²

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[Mo-P106]

Increased beta-band connectivity during angry face processing in children with autism

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[Mo-P107]

Quantification of language neural network in the developing brain with neuromagnetic Si

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[Mo-P108]

Receptive language mapping using the N400m in children with and without epilepsy

Shu Hui Yau, Elaine Foley, Stefano Seri, Caroline Witton, and Joel Talcott
Aston Univ., UK

[Mo-P109]

Cerebellar GABA concentration and intrinsic connectivity network synchrony in neurodevelopmental disorders

Benjamin Dunkley^{1*}, Simeon Wong¹, Wayne Lee¹, Jamie Near², Paul Arnold³, Russell Schachar¹, Jason Lerch⁴, Evdokia Anagnostou⁵, and Elizabeth Pang¹

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[Mo-P110]

Development of the semantic N400m activation and its link with behavioural skills

Tiina Parviainen, Krista Lehtomaki, Emilia Varmavuori, and Aino Löppönen
Univ. of Jyväskylä, Finland

8 : Language

[Mo-P111]

Greater MEG response accompanies faster and effortless retrieval of an intended word in verb generation task

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[Mo-P112]

Discrimination of word perception and imagination in a single-trial EEG basis using hierarchical extreme learning machine

Jongin Kim and Boreom Lee *
GIST, Korea

[Mo-P113]

Source-level EEG analysis for vowel speech perception using sLORETA

Hyeong-Jun Park, Beomjun Min, and Boreom Lee*
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[Mo-P114]

Predictive brain processing of listened audio narrative: MEG evidence

Miika Koskinen^{1,2}, Mikko Kurimo², Aapo Hyvärinen¹, and Riitta Hari²
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[Mo-P115]

Gestural enhancement of degraded speech comprehension engages the language network, motor and visual cortex as reflected by a decrease in the alpha and beta band

Linda Drijvers¹, Asli Ozyurek², and Ole Jensen¹
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[Mo-P116]

Oscillatory signatures of hand and foot verb-movement congruency in a double dissociation paradigm

Anne Klepp*, Hanneke van Dijk, Valentina Niccolai, Alfons Schnitzler, and Katja Biermann-Ruben
Heinrich Heine Univ. Düsseldorf, Germany

[Mo-P117]

Phonemic properties of expected words modulate pre-stimulus alpha oscillations

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[Mo-P118]

Large-scale functional networks underlying semantic vs. perceptual processing of written words

Mia Liljeström*, Jan Kujala, and Riitta Salmelin
Aalto Univ., Finland

[Mo-P119]

An MEG investigation of network synchronisation during expressive language processing in paediatric epilepsy

Elaine Foley^{1*}, Paul Furlong¹, Arjan Hillebrand², and Stefano Seri¹
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[Mo-P120]

Two opposing mechanisms underlying the audio-visual facilitation of speech tracking in prefrontal regions

Bruno L Giordano, Robin A. A. Ince, Joachim Gross, and Christoph Kayser
Univ. of Glasgow, UK

[Mo-P121]

Early occipital dissociation between numbers and letters: A magnetoencephalography study

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[Mo-P122]

Functional synchronization between two interacting brains during mother-child social interactions: a hyperscanning study with MEG

Patricia K Kuhl^{1*}, Jo-Fu Lotus Lin^{1,2}, Toshiaki Imada¹, Andrew N Meltzoff¹, Hirotoishi Hiraishi³, Takashi Ikeda³, Tetsuya Takahashi⁴, Chiaki Hasegawa³, Yuko Yoshimura³, Mitsuru Kikuchi³, Masayuki Hirata⁵, Yoshio Minabe³, and Minoru Asada⁵
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[Mo-P123]

The role of cortical oscillations in speech processing in adult naive speakers of a second language

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[Mo-P124]

Neural entrainment to speech rhythms reflects temporal predictions and influences word comprehension

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[Mo-P125]

Pre-operative language lateralization determined by magnetoencephalography in patients with temporal lobe epilepsy

Makoto Ishida*, Masaki Iwasaki*, Akitake Kanno, Kazutaka Jin, Yosuke Kakisaka, Ryuta Kawashima, and Nobukazu Nakasato
Tohoku Univ., Japan

[Mo-P126]

Audio-visual perception of familiar and unfamiliar syllables: a MEG study

Orsolya Kolozsvári, Weiyong Xu, Najla Azaiez Zammit Chatti, Natalia Louleli, Otto Loberg, Kaisa Lohvansuu, and Jarmo Hämäläinen
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[Mo-P127]

Do cortical oscillations track natural speech rhythms in children? A MEG study

Helene Guiraud^{1*}, Veronique Boulenger¹, Ana-Sofia Hincapie^{2,3,4}, and Karim Jerbi²
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[Mo-P128]

Shifts from normal to fast speech are associated with corresponding shifts in the frequency of neuronal entrainment: A MEG study

Ana-Sofia Hincapie^{1,2,3*}, Hannu Laaksonen^{4,5}, Dimitri Bayle⁶, Hélène Guiraud⁴, Karim Jerbi^{1*}, and Véronique Boulenger⁴
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[Mo-P129]

Mismatch responses to linguistic stimuli along the place-of-articulation continuum recorded with MEG in children

Kathryn Gill*, Banu Ahtam, Limin Sun, and Yoshio Okada
Harvard Medical School, USA

[Mo-P130]

Exploring verbal-motor connections in autism spectrum disorder using MEG

Maria Mody^{1*}, Baojuan Li¹, Christopher Wreh II², Christopher McDougle³, and Seppo Ahlfors¹
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[Mo-P131]

Difference of processing visual-stimuli in children with dyslexia

Kazuyori Yagyu*, Atsushi Shimojo, Hideaki Shiraishi, Satoshi Suyama, and Takuya Saitoh
Hokkaido Univ., Japan

[Mo-P132]

Near-instant neural access of word representations between 30-80 ms as revealed by MEG and EEG

Yury Shtyrov*

Aarhus Univ., Denmark

[Mo-P133]

Modulation of covert speech on overt loudness perception implies the mechanism of speech monitoring

Xing Tian^{1*}, Nai Ding², Xiangbin Teng³, and David Poeppel^{3,4}

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9 : Magnetocardiography

[Mo-P134]

Non-invasive evaluation of spatial repolarization dispersion abnormalities in patients presenting with coronary artery disease

Volodymyr Sosnytskyi^{1*}, Leonid Stadnyuk², Marina Dolzhenko², Taisya Sosnytska³, Yuri Minov⁴, Pavlo Sutkovyy¹, Yuri Frolov¹, and Olecsandr Nudchenko²

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[Mo-P135]

Applying a MCG current density imaging modality to reconstruct measures of repolarisation dispersion in patients susceptible to ventricular arrhythmias

Volodymyr Sosnytskyi^{1*}, Marina Dolzhenko², Leonyd Stadnyuk², Taisya Sosnytska³, Yuri Minov¹, Pavlo Sutkovyy¹, and Yuri Frolov¹

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[Mo-P136]

Imaging of repolarization dispersion from the inverse solution of distributed current density

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[Mo-P137]

Measurement of magnetocardiogram using magnetoresistive sensor

Yasuhiro Shirai^{1*}, Kenzo Hirao¹, Tomohiko Shibuya², Shuta Ushio¹, and Shigenori Kawabata¹

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[Mo-P138]

Visualization of the electrical current in atrioventricular node by magnetocardiograms

Yasuhiro Shirai^{1*}, Kenzo Hirao¹, Taishi Watanabe², Shuta Ushio¹, and Shigenori Kawabata¹

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[Mo-P139]

Dimensional contraction at noise rejection method based on independent component analysis for MCG

Iwai Morio* and Kobayashi Koichiro*

Iwate Univ., Japan

[Mo-P140]

A SQUID full-tensor MCG system and its possible use for cardiac source localization

Shulin Zhang, Longqin Qiu, Chaoxiang Zhang, and Xiaoming Xie

Chinese Academy of Sciences, China

[Mo-P141]

Possibilities of Magnetocardiography in detection of myocardial injury in pediatric cardiology

O. A. Oshlianska, I. A. Chaikovskiy*, V. M. Budnyk, Mykola (Mykolaiovych) Budnyk, and Yu. O. Frolov

Nat'l Academy of Sciences of Ukraine, Ukraine

[Mo-P142]

Potential of magnetocardiography in prediction of myocardial viability in patients with chronic coronary artery diseases

Ilyya Chaikovskiy^{1,2*}, Michael Lutay³, Helen Nemchynova³, Georgy Mjasnikov⁴, Anatoly Kazmirchyk⁴, Yury Frolov¹, and Mykola (Mykolaiovych) Budnyk¹

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[Mo-P143]

Value of magnetocardiography: the differential diagnosis between coronary artery disease and coronary microvascular disease using magnetocardiography

Ilyya Chaikovskiy^{1,2*}, Anton Popov³, Eugen Udovichenko³, Georgy Mjasnikov⁴, Anatoly Kazmirchyk⁴, and Andrey Verba⁴

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[Mo-P144]

A Simple and effective adaptive QRS detection algorithm based on the waveform characteristics of the QRS complex

Li Lu^{1*}, Kang Yang², Xiangyan Kong^{2*}, Meiling Wang², Hua Chen², Ruihu Yang², Ming Li², Shulin Zhang², and Xiaoming Xie²

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[Mo-P145]

Recent progress of MCG system development and its clinical application in SIM

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[Mo-P146]

Simulation of ventricular bioelectromagnetic activity to support ischemia detection

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