# Maria Guidi

Curriculum Vitae

(i) +39 388 096 3576
⊠ mariaguidi.13@gmail.com
110 mariaguidi.github.io/



# Researcher profile

# Research interest

I'm interested in improving the specificity and quantifiability of functional magnetic resonance imaging for neuroscientific applications. My research includes the use of non-BOLD contrasts, such as VASO and ASL, BOLD signal calibration and cerebrovascular reactivity mapping at high resolution at 7 T and 3 T.

#### Metrics

h-index 7 (Scopus), 9 (Scholar)

Citations 465 (Scopus), 806 (Scholar)

#### Profiles

ORCiD 0000-0002-1740-5405

- Scopus ID 56446509900
- Loop profile 1876921

# Work experience

## Academic

july 2024– **PostDoc (Assegno di ricerca Senior Fascia 3)**, *Istituto Nazionale di Fisica* present *Nucleare (INFN) – Laboratori Nazionali del Sud*, Catania, Italy.

European Commission – NextGenerationEU and Ministry of Health PNRR MAD-2022-12376889, "Development of advanced MRI methods and of tailored signal processing for the quantitative characterization of neurodegenerative diseases through novel biomarkers identification". Principal investigator: Dr. Giovanni Carlesimo.

sep 2021– **PostDoc (Assegno di ricerca)**, *MARBILab – Enrico Fermi Research Center (CREF)*, feb 2024 Rome, Italy.

Funded by Regione Lazio POR-FESR 2014–2020 A0375-2020-36648, "FISASMEM — Fisiologia dell'aging: sviluppo di metodi MRI quantitativi". Principal investigator: Dr. Federico Giove.

- oct 2017- PostDoc (wissenschaftlicher Mitarbeiter), Nuclear Magnetic Resonance Unit,
- mar 2018 Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany. Head of the Nuclear Magnetic Resonance Unit: Prof. Dr. Harald E. Möller.

#### Freelance and industry

- sep 2020- Scientific editor and writer, Freelance.
- aug 2021 VAT identification number: 03911101206
- sep 2018– **Scientific editor**, *Physics and Maths Editorial Line Zanichelli Editore S.p.A.*, aug 2020 Bologna, Italy.
  - Education
- 2013–2017 Ph.D. in Physics, Nuclear Magnetic Resonance Unit, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, Grade– Magna cum Laude. Project supervised by Prof. Dr. Harald E. Möller and funded by Marie Curie Initial Training Network "HiMR", FP7 Marie Curie Actions of the European Commission (FP7-PEOPLE-2012-ITN-316716).
- 2011–2013 **M.Sc. in Physics**, *Niels Bohr Institute (University of Copenhagen)*, Copenhagen, Denmark, *CGPA–11/12, M.Sc. Grade–12/12*.
- 2007–2010 **B.Sc. in Physics**, University of Bologna, Bologna, Italy, CGPA– 27/30, B.Sc. Grade– 110/110.

Exchange programs

- 2015–2016 **Secondment**, *Donders Centre for Cognitive Neuroimaging*, Nijmegen, The Netherlands, PhD secondment, under the supervision of Prof. Dr. David G. Norris.
- 2011–2012 **Academic exchange**, *University of Chile*, Santiago, Chile, First year of MSc studies in Physics.
- 2008–2009 **Erasmus exchange program**, *University of Iceland*, Reykjavik, Iceland, Second year of BSc studies in Physics.

## Postgraduate certified training

- 2013–2017 IMPRS NeuroCom Graduate Programme, The International Max Planck Research School on Neuroscience of Communication: Function, Structure, and Plasticity, Leipzig, Germany, https://imprs-neurocom.mpg.de/phd-programme. Number of credits: 24.5 (1 credit = a total workload of 30 hours)
- 2013–2016 **ESMRMB Lectures on MR**, *European Society for Magnetic Resonance in Medicine and Biology*, "Advanced methods for acquisition and analysis of fMRI data", Tübingen, Germany (November 2013); "Simultaneous multi-slice / multiband Imaging", Nijmegen, The Netherlands (January 2016); "Quantitative MRI for characterising brain tissue microstructure", Leipzig, Germany (June 2016).
  - 2014 **IDEA Sequence Programming Course**, *Siemens Healthineers*, Siemens Healthcare Training Center, Cary, NC, USA. Duration of the training: 40 hours

#### Projects and grants

2022–2024 European Commission – NextGenerationEU and Ministry of Health PNRR MAD-2022-12376889, "Development of advanced MRI methods and of tailored signal processing for the quantitative characterization of neurodegenerative diseases through novel biomarkers identification". Collaborator. 1000000 €.

- 2021–2024 Regione Lazio POR-FESR 2014–2020 A0375-2020-36648, "FISASMEM Fisiologia dell'aging: sviluppo di metodi MRI quantitativi". Funding of a postdoc position. 149614 €.
- 2013–2016 Marie Curie Initial Training Network "HiMR", FP7 Marie Curie Actions of the European Commission (FP7-PEOPLE-2012-ITN-316716). Funding of the PhD position.
- 2008–2009 Erasmus grant for European mobility. Funding for a year of undergraduate studies abroad.

# Awards

- 2024 Best Presentation Award Italian Physical Society (SIF)
- 2023 & 2015 Summa cum Laude Merit Award International Society for Magnetic Resonance in Medicine (ISMRM)
  - 2014 Magna cum Laude Merit Award International Society for Magnetic Resonance in Medicine (ISMRM)

## Memberships

- 2024–2025 Full Membership, International Society for Magnetic Resonance in Medicine (ISMRM), Concord, CA, 94520 USA
  - 2024 Full Membership, Italian Physical Society (SIF), Bologna, Italy
  - 2024 Junior Membership, Italian Society for Magnetic Resonance in Medicine (AIRMM), Milan, Italy
- 2023 & Trainee Membership, International Society for Magnetic Resonance in Medicine
- 2013–2017 (ISMRM), Concord, CA, 94520 USA
- 2013–2019 Junior Membership, Italian Physical Society (SIF), Bologna, Italy

# Affiliations

- 2021–2024 Enrico Fermi Research Center, Rome, Italy
- 2022-present Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany
- 2022-present Donders Centre for Cognitive Neuroimaging, Nijmegen, The Netherlands
- 2013–2018 Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

#### Review and editorial experience

- 2023 Research Topic Coordinator, Frontiers in Neuroscience.
- 2023 **Review editor**, Brain Imaging Methods, Frontiers in Neuroscience.
- 2023 **Content writer**, *MRM Highlights*, *Wiley*.

#### Review

2017–present Reviewing activity for Neuroimage, PLOS one, Imaging Neuroscience, Journal of Cerebral Blood Flow and Metabolism, Frontiers

#### Dissemination

- 2023–present Organization of international biweekly scientific meetings (virtual) on the topic of layer fMRI
- 2014-present Oral presentations at over 10 international conferences and workshops
  - 2014 Co-organization of a Collaborative Workshop on Siemens IDEA Sequence Programming, Hotel des Congrès, Lyon, France
  - 2021–2023 Presentation at the annual institutional Open Day for high school students, Fondazione Santa Lucia IRCCS, Rome, Italy
  - 2015–2017 Presentation at the annual institutional Open Day, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

## Supervision and reviewing experience

- 2024 Reviewer of the PhD thesis of Dr. Viktória Kokošová, Masaryk University, Brno, Czech Republic
- 2022 Committee member of the PhD thesis defense of Dr. Viktor Pfaffenrot "Laminar fMRI of long-range connections: Methods and contrast mechanisms", Erwin L. Hahn Institute for Magnetic Resonance Imaging, Essen Germany
- 2018 Supervision of a Master's student thesis in Medical Physics on the topic of layerspecific fMRI in human somatosensory cortex, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

## Languages

Native Italian

- Level C1 English, Spanish, German
- Level A2 Danish, Czech

#### Miscellaneous

- 2016–2018 **Homework assistant for refugees**, *Refugee Council of Leipzig (Flüchtlingsrat Leipzig)*, Leipzig, Germany.
  - 2018 **24 credits in anthropo-psycho-pedagogical disciplines and didactic methodologies**, *University of Bologna*.
  - 2012 Maintenance of ultra-high vacuum chamber, *FCFM Solid Surface Laboratory*, University of Chile, Santiago, Chile.

# Journal articles

- 1. Fabio Mangini, Marta Moraschi, Daniele Mascali, <u>Maria Guidi</u>, Michela Fratini, Silvia Mangia, Fabrizio Frezza, and Federico Giove. Towards whole brain mapping of the haemodynamic response function. *In press, JCBFM*, 2025.
- <u>Maria Guidi</u>, Giovanni Giulietti, Daniel Sharoh, Irati Markuerkiaga, Lasse Knudsen, Benedikt A. Poser, Laurentius Huber, Harald E. Möller, David G. Norris, and Federico Giove. Impact of thermal and physiological denoising on laminar functional connectivity. *Submitted*, 2025.

- 3. Irene Egidi, <u>Maria Guidi</u> and Federico Giove. Compartmentalisation of sodium in the human brain: a mini-review of 23 Na-MRI methods. *Under review*, 2025.
- 4. <u>Maria Guidi</u>, Mauro DiNuzzo, and Federico Giove. Invecchiamento cerebrale Valutazione mediante neuroimmagini MR. *La Neurologia Italiana*, XIX (2023), 13-20.
- 5. <u>Maria Guidi</u>, Giovanni Giulietti, Emma Biondetti, Richard Wise, and Federico Giove. Towards high-resolution quantitative assessment of vascular dysfunction. *Frontiers in Physics*, 11:1248021, 2023.
- Mauro DiNuzzo, Daniele Mascali, Giorgia Bussu, Marta Moraschi, <u>Maria Guidi</u>, Emiliano Macaluso, Silvia Mangia, and Federico Giove. Hemispheric functional segregation facilitates target detection during sustained visuospatial attention. *Human Brain Mapping*, 43(15), 2022.
- 7. <u>Maria Guidi</u>, Laurentius Huber, Leonie Lampe, Alberto Merola, Kristin Ihle, and Harald E. Möller. Cortical laminar resting-state signal fluctuations scale with the hypercapnic blood oxygenation level-dependent response. *Human Brain Mapping*, 41(8), 2020.
- 8. Laurentius Huber, Dimo Ivanov, Daniel A. Handwerker, Sean Marrett, <u>Maria Guidi</u>, Kâmil Uludağ, Peter A. Bandettini, and Benedikt A. Poser. Techniques for blood volume fMRI with VASO: From low-resolution mapping towards sub-millimeter layer-dependent applications. *NeuroImage*, 2018.
- Laurentius Huber, Daniel A. Handwerker, David C. Jangraw, Gang Chen, Andrew Hall, Carsten Stüber, Javier Gonzalez-Castillo, Dimo Ivanov, Sean Thomas Marrett, <u>Maria Guidi</u>, Jozien Goense, Benedikt A. Poser, and Peter A. Bandettini. High-Resolution CBV-fMRI Allows Mapping of Laminar Activity and Connectivity of Cortical Input and Output in Human M1. *Neuron*, 96(6), 2017.
- 10. <u>Maria Guidi</u>, Laurentius Huber, Leonie Lampe, Claudine J. Gauthier, and Harald E. Möller. Lamina-dependent calibrated BOLD response in human primary motor cortex. *NeuroImage*, 141:250–261, 2016.
- 11. Amalie Christensen, Christophe Raufaste, Marek Krzysztof Misztal, Franck Celestini, <u>Maria Guidi</u>, Clive Ellegaard, and Joachim Mathiesen. Scale selection in columnar jointing: Insights from experiments on cooling stearic acid and numerical simulations. *Journal of Geophysical Research: Solid Earth*, 121 (3), 2016.
- Laurentius Huber, Jozien Goense, Aneurin J. Kennerley, Robert Trampel, <u>Maria Guidi</u>, Enrico Reimer, Dimo Ivanov, Nicole Neef, Claudine J. Gauthier, Robert Turner, and Harald E. Möller. Cortical lamina-dependent blood volume changes in human brain at 7 T. *NeuroImage*, 107:23–33, 2016.
- 13. Laurentius Huber, Dimo Ivanov, <u>Maria Guidi</u>, Robert Turner, Kâmil Uludağ, Harald E. Möller, and Benedikt A. Poser. Functional cerebral blood volume mapping with simultaneous multi-slice acquisition. *NeuroImage*, 125:1159–1168, 2015.

# Oral presentations

1. Luca Cairone, <u>Maria Guidi</u>, Mauro DiNuzzo, Irene Egidi, Chiara Ercolano, Michela Fratini, Antonio Napolitano, Silvia Mangia, and Federico Giove. Metabolic response in deactivated areas using

fMRS at 3 T. Proceedings of the 110 Annual Meeting of the Italian Physical Society (SIF), Bologna, Italy, 9-13 September, 2024.

- Chiara Ercolano, Donatella Mattia, Federico Giove, Michela Fratini, <u>Maria Guidi</u>, Giovanni Giulietti, Luca Cairone, Irene Egidi, and Emma Colamarino. Development of quantitative magnetic resonance imaging methods of the spinal cord. *Proceedings of the 110 Annual Meeting* of the Italian Physical Society (SIF), Bologna, Italy, 9-13 September, 2024.
- Irene Egidi, Luca Cairone, Chiara Ercolano, Giovanni Giulietti, <u>Maria Guidi</u>, Michela Fratini, and Federico Giove. A post-processing pipeline for 23Na-MRI of the brain: Preliminary applications for Alzheimer disease. *Proceedings of the 110 Annual Meeting of the Italian Physical Society* (SIF), Bologna, Italy, 9-13 September, 2024.
- Giovanni Giulietti, <u>Maria Guidi</u>, Harald E. Moeller, David G. Norris, and Federico Giove. Evaluation of denoising methods in ultra-high field fMRI data and their impact on distinct human brain regions. *Proceedings of the 110 Annual Meeting of the Italian Physical Society (SIF), Bologna, Italy*, 9-13 September, 2024.
- Maria Guidi, Giovanni Giulietti, Harald E. Moeller, David G. Norris, and Federico Giove. Effect of denoising on laminar connectivity in fMRI. Proceedings of the 110 Annual Meeting of the Italian Physical Society (SIF), Bologna, Italy, 9-13 September, 2024.
- Luca Cairone, <u>Maria Guidi</u>, Mauro Di Nuzzo, Irene Egidi, Chiara Ercolano, Michela Fratini, Antonio Napolitano, Silvia Mangia, Federico Giove. Metabolic response to negative BOLD response using fMRS at 3T. *Proceedings of the XV Annual Meeting of the Italian Society for Magnetic Resonance in Medicine (AIRMM), Padua, Italy*, 15-17 April, 2024.
- Maria Guidi, Fabio Mangini, Marta Moraschi, Daniele Mascali, Michela Fratini, Silvia Mangia, Fabrizio Frezza, and Federico Giove. Towards whole brain mapping of the hemodynamic response function (invited). Brain Function Study Group Virtual Meeting: The Canonical HRF: A Quarter Century Later, 25 March 2024.
- 8. <u>Maria Guidi</u>, Giovanni Giulietti, Harald E. Möller, David G. Norris, and Federico Giove. Depth-Dependent Effects of Thermal and Physiological Noise Reduction in BOLD fMRI. *Proceedings of the ISMRM Workshop Current Issues in Brain Function, Padua, Italy*, 2023.
- 9. <u>Maria Guidi</u>, Fabio Mangini, Marta Moraschi, Daniele Mascali, Michela Fratini, Silvia Mangia, Fabrizio Frezza, and Federico Giove. Towards whole brain mapping of the hemodynamic response function. *Proceedings of the 31st Annual Meeting of the International Society for Magnetic Resonance in Medicine, Toronto, ON, Canada*, abstract 1175, 2023.
- 10. <u>Maria Guidi</u>. FMRI at high-resolution issues and workarounds (<u>invited</u>). *Workshop on Multimodal Approach for Biomedical Application, Sapienza University, Rome*, April 21st, 2023.
- 11. Alberto Merola, <u>Maria Guidi</u>, and Nikolaus Weiskopf. Hypercapnic and hyperoxic laminar calibrated BOLD: are conventional models adequate? *Proceedings of the 26th Annual Meeting of the International Society for Magnetic Resonance in Medicine, Paris, France*, abstract 397, 2018.
- 12. <u>Maria Guidi</u>, Irati Markuerkiaga, Lauren J. Bains, Laurentius Huber, Harald E. Möller, and David G. Norris. Frequency signature of cortical laminar fMRI. *Proceedings of the 25th Annual Meeting*

of the International Society for Magnetic Resonance in Medicine, Honolulu, HI, USA, abstract 158, 2017.

- Laurentius Huber, Daniel A. Handwerker, Andrew Hall, David C. Jangraw, Javier Gonzales-Castillo, <u>Maria Guidi</u>, Dimo Ivanov, Benedikt A. Poser, and Peter A. Bandettini. Cortical depth-dependent fMRI: heterogeneity across tasks, across participants, across days and along the cortical ribbon. *Proceedings of the 25th Annual Meeting of the International Society for Magnetic Resonance in Medicine, Honolulu, HI, USA*, abstract 237, 2017.
- 14. <u>Maria Guidi</u>, Laurentius Huber, Leonie Lampe, and Harald E. Möller. Cortical laminar resting-state fluctuations scale with hypercapnic response. *Proceedings of the 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine, Singapore*, abstract 769, 2016.
- Laurentius Huber, Daniel Handwerker, Javier Gonzales-Castillo, Sean Marrett, <u>Maria Guidi</u>, Dimo Ivanov, Benedikt Poser, Jozien Goense, and Peter A. Bandettini. Directional connectivity measured with layer-dependent fMRI in human sensory-motor system. *3rd Biennial Whistler Scientific Workshop on Brain Functional Organization, Connectivity and Behavior, Whistler, BC, Canada*, 2016.
- Laurentius Huber, Daniel Handwerker, Javier Gonzales-Castillo, David Jangraw, <u>Maria Guidi</u>, Dimo Ivanov, Benedikt A. Poser, Jozien B.M. Goense, and Peter A. Bandettini. Effective Connectivity Measured with Layer-Dependent Resting-State Blood Volume FMRI in Humans. *Proceedings of the 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine, Singapore*, abstract 948, 2016.
- Maria Guidi, Laurentius Huber, Leonie Lampe, Claudine J. Gauthier, and Harald E. Möller. Layerdependent calibrated BOLD response in human M1. Proceedings of the 23rd Annual Meeting of the International Society for Magnetic Resonance in Medicine, Toronto, ON, Canada, abstract 358, 2015.
- 18. <u>Maria Guidi</u>, Laurentius Huber, Leonie Lampe, Claudine J. Gauthier, and Harald E. Möller. Layerdependent calibrated BOLD in human M1. *1st Summer School of Ultra-High Field Magnetic Resonance Imaging, Isola d'Elba, Italy*, 2015.
- Laurentius Huber, Dimo Ivanov, <u>Maria Guidi</u>, Rober Turner, Kâmil Uludağ, and Harald E. Möller. Simultaneous multi-slice functional CBV measurements at 7 T. *Proceedings of the 23rd Annual Meeting of the International Society for Magnetic Resonance in Medicine, Toronto, ON, Canada*, abstract 600, 2015.
- 20. Harald E. Möller, Laurentius Huber, <u>Maria Guidi</u>, Juliane Dinse, and Pierre Louis Bazin. Unraveling cortical laminae with anatomical and functional MRI at 7.0 T. *6th Annual Scientific Symposium on Ultrahigh Field Magnetic Resonance, Berlin, Germany*, 2015.
- 21. Harald E. Möller, Laurentius Huber, <u>Maria Guidi</u>, and Robert Turner. Beyond BOLD-based fMRI: High-resolution mapping of blood volume changes related to neural activity. *1st Summer School* of Ultra-High Field Magnetic Resonance Imaging, Isola d'Elba, Italy, 2015.
- 22. <u>Maria Guidi</u>, Laurentius Huber, Leonie Lampe, Claudine J. Gauthier, and Harald E. Möller. Layer-dependent calibrated BOLD in human M1. *Proceedings of the 2nd Workshop on Imaging*

*Cerebral Physiology: Manipulating Magnetic Resonance Contrast through Respiratory Challenges, Leipzig, Germany,* 2014.

- 23. Laurentius Huber, Jozien B.M. Goense, Aneurin Kennerley, Robert Trampel, <u>Maria Guidi</u>, Claudine J. Gauthier, Robert Turner, and Harald E. Möller. Layer-dependent CBV and BOLD responses in humans, monkeys, and rats at 7T. *ISMRM Workshop on Functional MRI: Emerging Techniques and New Interpretations, Charleston, SC, USA*, 2014.
- 24. Laurentius Huber, Aneurin Kennerley, Claudine J. Gauthier, Steffen Krieger, <u>Maria Guidi</u>, Dimo Ivanov, Robert Turner, and Harald E. Möller. Cerebral blood volume redistribution during hypercapnia. *Proceedings of the 2nd Workshop on Imaging Cerebral Physiology: Manipulating Magnetic Resonance Contrast through Respiratory Challenges, Leipzig, Germany*, 2014.

#### Posters

- 1. <u>Maria Guidi</u>, Giovanni Giulietti, Harald E. Moeller, David G. Norris, and Federico Giove. Effect of denoising on laminar functional connectivity. *Proceedings of the XV Annual Meeting of the Italian Society for Magnetic Resonance in Medicine (AIRMM), Padua, Italy*, 15-17 April, 2024.
- Giovanni Giulietti, <u>Maria Guidi</u>, Harald E. Moeller, David G. Norris, and Federico Giove. Comparison of denoising techniques in ultra-high field fMRI data and their effect on different brain tissues. *Proceedings of the XV Annual Meeting of the Italian Society for Magnetic Resonance in Medicine (AIRMM), Padua, Italy*, 15-17 April, 2024.
- 3. Chiara Ercolano, Michela Fratini, <u>Maria Guidi</u>, Giovanni Giulietti, Luca Cairone, Irene Egidi, Emma Colamarino, Alessandra Bigioni, Federica Tamburella, Donatella Mattia, and Federico Giove. Development of quantitative MR imaging methods of the spinal cord. *Proceedings of the XV Annual Meeting of the Italian Society for Magnetic Resonance in Medicine (AIRMM), Padua, Italy*, 15-17 April, 2024.
- Irene Egidi, Luca Cairone, Chiara Ercolano, Michela Fratini, <u>Maria Guidi</u>, and Federico Giove. Noise reduction in 23Na-MRI in vivo: a comparison between non-local-mean methods. *Proceedings* of the XV Annual Meeting of the Italian Society for Magnetic Resonance in Medicine (AIRMM), Padua, Italy, 15-17 April, 2024.
- Maria Guidi, Giovanni Giulietti, Harald E. Moeller, David G. Norris, and Federico Giove. Depthdependent effects of thermal and physiological noise reduction in BOLD fMRI. Proceedings of the 31st Annual Meeting of the International Society for Magnetic Resonance in Medicine, Toronto, ON, Canada, abstract 2718, 2023.
- Michela Fratini, Isabel San Martín Molina, Manfred Burghammer, Tilman Grünewald, Raimo A. Salo, Omar Narvaez, <u>Maria Guidi</u>, Federico Giove, Manisha Aggarwal, Jussi Tohka, Alejandra Sierra, and Gaetano Campi. A multiscale approach based on the combination Of DTI, XRD and histology to study the myeloarchitecture in a rat model of MTBI. *Proceedings of the 31st Annual Meeting of the International Society for Magnetic Resonance in Medicine, Toronto, ON, Canada*, abstract 4542, 2023.
- 7. Michela Fratini, Lorenzo Giovannelli, Laura Maugeri, Mauro DiNuzzo, Marta Moraschi, <u>Maria Guidi</u>, Daniele Mascali, Irene Egidi, and Federico Giove. Spinal cord fMRI to investigate the Relapsing-Remitting Multiple Sclerosis (RRMS) patients. *Proceedings of the 31st Annual Meeting of the*

International Society for Magnetic Resonance in Medicine, Toronto, ON, Canada, abstract 1563, 2023.

- 8. Michela Fratini, Laura Maugeri, <u>Maria Guidi</u>, Mauro DiNuzzo, Marta Moraschi, Fabio Mangini, Irene Egidi, Daniele Mascali, Valerio Pisani, Ugo Nocentini, and Federico Giove. Characterization of the spinal cord fMRI signal in the healthy subjects and in multiple sclerosis patients. *Proceedings of the 30th Annual Meeting of the International Society for Magnetic Resonance in Medicine*, *London, UK*, abstract 1459, 2022.
- 9. Susanne Fuchs, <u>Maria Guidi</u>, Birol Taskin, and Harald E. Möller. An Approach to Layer-Specific Functional Imaging of Human Primary Somatosensory Cortex. *Brain in depth (BID) symposium*, *DZNE Magdeburg*, 31st March 2018.
- Maria Guidi, Christopher J. Steele, Laurentius Huber, Leonie Lampe, Viola Rjosk, Pierre Louis Bazin, and Harald E. Möller. High-Resolution CMRO2 Mapping During a Unilateral Pinch-Force Task Proceedings of the 24th Annual Meeting of the International Society for Magnetic Resonance in Medicine, Singapore, abstract 1720, 2016.
- 11. <u>Maria Guidi</u>, Christopher J. Steele, Laurentius Huber, Leonie Lampe, Viola Rjosk, Pierre Louis Bazin, and Harald E. Möller. High-Resolution CMRO2 Mapping During a Unilateral Pinch-Force Task *6th IMPRS NeuroCom Summer School*, *Leipzig*, *Germany*, 2016.
- Laurentius Huber, Jozien B.M. Goense, Aneurin Kennerley, <u>Maria Guidi</u>, Robert Trampel, Robert Turner, and Harald E. Möller. Micro- and macrovascular contributions to layer-dependent blood volume fMRI: A multi-modal, multi-species comparison. *Proceedings of the 23rd Annual Meeting* of the International Society for Magnetic Resonance in Medicine, Toronto, ON, Canada, abstract 2114, 2015.
- Laurentius Huber, <u>Maria Guidi</u>, Jozien B.M. Goense, Toralf Mildner, Robert Trampel, Jessica Schulz, Cornelius Eichner, Robert Turner, and Harald E. Möller. The magnitude point spread function is an inadequate measure of T2\*-blurring in EPI. *Proceedings of the 23rd Annual Meeting* of the International Society for Magnetic Resonance in Medicine, Toronto, ON, Canada, abstract 2056, 2015.
- Miguel Martínez-Maestro, <u>Maria Guidi</u>, Laurentius Huber, Štefan Holiga, Henrik Marschner, and Harald E. Möller. fMRS of visual cortex at 3T with periodic averaging of a block design paradigm. Proceedings of the 23rd Annual Meeting of the International Society for Magnetic Resonance in Medicine, Toronto, ON, Canada, abstract 4638, 2015.
- 15. Christian Labadie, Tomas Siegert, Enrico Reimer, <u>Maria Guidi</u>, Miguel Martínez-Maestro, Harald E. Möller, Robert Turner, and Jessica Schulz. Adaptive motion correction of single-voxel spectroscopy with real-time frequency correction at 3T and 7T. *Proceedings of the 22nd Annual Meeting of the International Society for Magnetic Resonance in Medicine, Milano, Italy*, 2014.
- Miguel Martínez-Maestro, <u>Maria Guidi</u>, Christian Labadie, and Harald E. Möller. Should beginners revisit the ancient and honourable art of shimming at high fields? *Proceedings of the 22nd Annual Meeting of the International Society for Magnetic Resonance in Medicine, Milano, Italy*, abstract 7332, 2014.

Rome, January 15, 2025