Simona Schiavi

PhD in Applied Mathematics

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Italian Driver Licence B



Current Position

Oct. 2026 **Associate Professor (PHYS-06/A)**, *UniCamillus*, Rome, Italy
As associate professor of medical physics, I teach physics courses at Saint Camillus International University of Health Sciences (Unicamillus).

Research interests

Modelling and numerical simulations of microstructural quantification through MRI.

Microstructure Informed Tractography.

Biomedical imaging.

Inverse Problems, Soft Computing and Clustering.

Experiences

2024-2026 **R&D MRI Sequences and Software**, *ASG Superconductors S.p.A.*, Genoa, Italy
In the R&D team, my role was to develop and implement advanced image processing methods to improve the quality of the MR Open EVO 0.5Tesla system and introduce state-of-the-art diagnostic parameters.

2022-2024 **MRI Quality Control Specialist**, *at ASG Superconductors S.p.A.*, Genoa, Italy
As a quality control (QC) specialist in the production of the MR Open 0.5T scanner of ASG Superconductors, I was responsible for developing and implementing QC methods in both processes and assessing the quality of all components needed for the construction of the MRI scanner, as well as participating in new supplier qualifications. My role required me to manage a staff of quality control operators and analyze and optimize the productive processes in order to ensure both the safety and quality of the product. I was also responsible for managing the instrumentation subject to periodic calibration to meet international medical regulations (CE, FDA, etc).

2021-2022 **Post-Doc on "Structural connectivity in multiple sclerosis: standard and novel magnetic resonance imaging techniques to quantify it"**, *at Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOGMI)*, University of Genoa, Italy
I worked with Prof. Matilde Inglese on the characterization of structural connectivity disruptions due to multiple sclerosis disease.

2020-2021 **Post-Doc on "Development and implementation of advanced tools and tutorials to support lectures and laboratories on modelling and numerical simulations at CdLM in Mathematics"**, *at Department of Computer Science*, University of Verona, Italy
I worked with Prof. Marco Caliari on a project founded by "Dipartimenti di Eccellenza: Informatica per Industria 4.0" and Prof. Alessandro Daducci on the development of quantitative methods to improve the estimation of the brain structural connectivity.

2018-2020 **Post-Doc on "Towards quantitative and biologically oriented connectivity analyses with multi-contrast MRI"**, *at Department of Computer Science*, University of Verona, Italy
I worked with Prof. Alessandro Daducci on the development of truly quantitative and biologically meaningful analyzes of brain connectivity.

Sept.-Oct. 2019 **Visiting Post-Doc**, *CUBRIC*, Cardiff, UK
Visiting Prof. Derek Jones' laboratory for 2 months to understand how to inject MEG-derived functional prior to the estimation of structural connectivity.

2017-2018 **Research associate on "Conventional and novel MRI approaches applied to Multiple Sclerosis"**, *at DINOGMI*, University of Genoa, Italy
I worked under the supervision of Prof. Matilde Inglese on the clinical application of Diffusion MRI with particular attention to multiple sclerosis disease.

Sept.-Nov. 2017 **Visiting Post-Doc**, *Hess Center for Science and Medicine at Mount Sinai Hospital*, New York, USA
Visiting Prof. Matilde Inglese's laboratory for 3 months to apply advanced diffusion MRI techniques to characterize microstructural changes due to multiple sclerosis disease.

Education

2013-2016 **PhD in Applied Mathematics**, *INRIA-École Polytechnique*, Paris Saclay, France
with a thesis on *Homogenized and analytical models for the diffusion MRI signal* under the supervision of Prof. Houssem Haddar and PhD Jing-Rebecca Li.

2011-2013 **Master in Applied Mathematics**, *Università degli Studi di Genova*, Genoa, Italy
with a thesis on *Clustering techniques with applications to Neuroblastoma early diagnosis* under the supervision of Prof. M. Piana and PhD A. M. Massone.

2008-2011 **Bachelor's degree in Mathematics**, *Università degli Studi di Genova*, Genoa, Italy

Complementary Courses

Feb 2024 **Qualifying course Leak Test level 2**, *RINA*, Italy, Certificate Number 23TO00867PN30

2021-2022 **24 CFU to teach at high school**, *Università degli Studi di Genova*, Genoa, Italy

17-19 May 2017 **Brain Connectivity Workshop**, *ETH University*, Zurich, Switzerland

28-30 Sept. 2015 **ESMRMB Lecture on MRI**, *Diffusion: What it means and how to measure it*, University of Edinburgh, Scotland

24-28 Aug. 2015 **Franco-German Summer School**, *Inverse problems for Waves*, École Polytechnique, Paris, France

6-10 July 2015 **3rd Biomedical Image Analysis Summer School**, *Modalities, Methodologies & Clinical Research*, CentraleSupelec & INRIA, Paris, France

9-14 June 2014 **CIME (International Mathematical Summer Center) summer school**, *Computational Electromagnetism*, Cetraro, Italy

7-11 Oct. 2013 **Franco-German Summer School**, *Inverse Problem and PDE*, University of Bremen, Bremen, Germany

4-8 March 2013 **Workshop on Multimodal Neuroimaging**, *IPAM, University of California Los Angeles*, CA, USA

August 2012 **Summer courses in Statistics and Stochastic Differential Equations**, *Scuola Matematica Interuniversitaria di Perugia*, Perugia, Italy

National Scientific Qualification

2025-2037 **ASN 2023/2025**, *National Scientific Qualification as Associate Professor for the sector 06/N1 - Health Professional Sciences And Applied Medical Technologies, MEDS-26/D*

2025-2037 **ASN 2023/2025**, *National Scientific Qualification as Associate Professor for the sector 02/D1 - Applied Physics, Teaching and History Of Physics, PHYS-06/A*

Teaching

2026-2027 **Teaching**, *MSc Dentistry and Dental Prosthetics in Italian*, UniCamillus Venice Mestre, Italy
Applied Physics (5CFU) https://unicamillus.org/wp-content/uploads/odontoiatria_mestre/schede-insegnamento/26-27/i-anno/si_2026_fisicaapplicata_odo_veneziamestre.pdf?x45597&_gl=1*uwlh8m*_up*MQ..*_ga*NjMzMzA2Nzc2LjE3OTEyMDY3MTY.*_ga_XFJMNJBV5Q*czE3OTEyMDY3MTYkbzEkZzAkdDE3OTEyMDg1MjMkajQyJGwwJGgxMjE5MDQ1MDAz

2026-2027 **Teaching**, *Degree Program in Medicine and Surgery in Italian*, UniCamillus Venice Lido, Italy
Integrated Course: Physics, Statistics, Informatics, Information Processing System (2CFU of Physics) https://unicamillus.org/en/medicine-venice-study-plan/year-of-enrolment-2026-2027/?_gl=1*9x40la*_up*MQ..*_ga*NjMzMzA2Nzc2LjE3OTEyMDY3MTY.*_ga_XFJMNJBV5Q*czE3OTEyMDY3MTYkbzEkZzAkdDE3OTEyMDgzNDIkajYwJGwwJGgxMjE5MDQ1MDAz

2026-2027 **Teaching**, *Degree Program in Medicine and Surgery in Italian*, UniCamillus Venice Mestre, Italy
Integrated Course: Physics, Statistics, Informatics, Information Processing System (2CFU of Physics) https://unicamillus.org/en/medicine-venice-study-plan/year-of-enrolment-2026-2027/?_gl=1*9x40la*_up*MQ..*_ga*NjMzMzA2Nzc2LjE3OTEyMDY3MTY.*_ga_XFJMNJBV5Q*czE3OTEyMDY3MTYkbzEkZzAkdDE3OTEyMDgzNDIkajYwJGwwJGgxMjE5MDQ1MDAz

2026-2027 **Teaching**, *Degree Program in Medicine and Surgery in English*, UniCamillus Rome, Italy
Integrated Course: Physics, Statistics, Informatics, Information Processing System (1CFU of Physics for each module) https://unicamillus.org/wp-content/uploads/medicina_roma/schede-insegnamento/a.a/26-27/i-anno/eng/en_phys-stat-inf-sys-2026.pdf?x49063&_gl=1*1wmejce*_up*MQ..*_ga*NjMzMzA2Nzc2LjE3OTEyMDY3MTY.*_ga_XFJMNJBV5Q*czE3OTEyMDY3MTYkbzEkZzAkdDE3OTEyMDgwNzYkajYwJGwwJGgxMjE5MDQ1MDAz

2019-2021 **Teaching**, *Computer Science Department*, University of Verona, Italy
Laboratory of Numerical Methods for Partial Differential Equations for MSc in Applied Mathematics. https://www.corsi.univr.it/?ent=cs&aa=2019%2F2020&codiceCs=S72&codins=4S008270&discr=&discrCd=&id=389&menu=Studiare&tab=Insegnamenti&lang=ithttp

2019-2021 **Teaching**, *Computer Science Department*, University of Verona, Italy
Laboratory of Data Fitting and Reconstruction for Master of Science in Applied Mathematics. https://www.corsi.univr.it/?ent=cs&aa=2019%2F2020&codiceCs=S72&codins=4S008269&discr=&discrCd=&id=389&menu=studiare&tab=insegnamenti&lang=en

2018-2019 **Teaching**, *Department of Physics*, University of Padova, Italy
Laboratory of image processing programming for the Specialization school in Medical Physics

2018-2019 **Teaching assistant**, *Computer Science Department*, University of Verona, Italy
Scientific Computing for Master of Science in Applied Mathematics. https://www.corsi.univr.it/?ent=cs&id=389&menu=studiare&tab=insegnamenti&codiceCs=S72&codins=4S001115&crediti=6.0&aa=2018/2019&lang=it

2018-2020 **Teaching**, *Department of Physics*, University of Padova, Italy
Image processing for the Specialization School of Medical Physics

2018-2019 **Teaching**, *Computer Science Department*, University of Verona, Italy
OFA for BSc in Computer Science, Bioinformatics, Applied Mathematics and Biotechnology.

2018-2022 **Teaching assistant**, *Computer Science Department*, University of Verona, Italy
Biomedical image processing for Master of Science in Bioinformatics. https://www.corsi.univr.it/?ent=cs&aa=2017%2F2018&codiceCs=S79&codins=4S004554&discr=&discrCd=&id=769&menu=Studiare&tab=Insegnamenti

2018-2022 **Teaching assistant**, *Computer Science Department*, University of Verona, Italy
Image processing for the Bachelor of Science in Bioinformatics. https://www.corsi.univr.it/?ent=cs&aa=2018%2F2019&codiceCs=S23&codins=4S003710&discr=&discrCd=&id=419&menu=Studiare&tab=Insegnamenti&lang=en

Supervising and mentoring activities

Bachelor Level — **Co-supervisor of around 70 students for their bachelor projects**, *Department of Computer Science*, University of Verona, Italy

Medicine — **Co-supervisor of 1 Medical Doctor Thesis**, *Department of Neuroscience, Rehabilitation, Ophthalmology, Genetics, Maternal and Child Health (DINOGMI)*, University of Genoa

Clementi Thoma Dario *Advanced brain MRI in NMOSD: microstructural characterization of white matter lesion* (July 2022)

Master Level — **Co-supervisor of 13 final master projects**, *Department of Computer Science*, University of Verona, Italy

Carlotta Fabris *An investigation of the relationship between structural connectivity and axonal biomarker changes in Multiple Sclerosis patients* (March 2019)
Filippo Baccaglini *Improving the accuracy of brain connectivity analyzes with Gaussian blurring of fiber contributions* (July 2019)
Valentina Nale *Reducing the uncertainty in microstructure-informed tractography using clustering techniques* (July 2019)
Sara Bosticardo *Investigating the sensitivity of global network measures and different microstructural features to capture the progress of multiple sclerosis* (July 2020)
Ilaria Gabusi *Characterising structural connectivity in Fabry disease using Microstructure Informed Tractography* (March 2021)
Francesco Gobbi *Analisi e caratterizzazione di un nuovo modello di rappresentazione della connettività cerebrale* (March 2021)
Alberto Purrone *Testing the efficacy of microstructure-informed tractography in detecting the progression of multiple sclerosis* (March 2021)
Luca Bertoli *Investigating atrophy and structural connectivity disruptions in subjects affected by impulse control disorders due to Parkinson's disease* (October 2021)
Nicola Febbrari *Redundancy in tractography and its implications for the accuracy of brain connectivity estimates* (October 2021)
Chiara Bersaglia *Comparison of clustering algorithms to reduce redundancy in tractography* (March 2022)
Gaia Mari *Exploring structural connectivity disruptions caused by multiple sclerosis in african americans* (March 2022)
Daniele Bollani *Investigating topological changes of brain networks in young adults* (May 2022)
Clorindo Notte *Development of an open-source, cross-platform, standalone graphical interface for the AMICO framework* (May 2022)

Master Level — **Co-supervisor of 1 final master projects**, *Department of Bioengineering*, University of Genoa, Italy

Gilberto Firpo *Using Deep Learning Methods to classify artifacts in MR images* (October 2026)

PhD Level — **Co-supervisor of 1 PhD project**, *Department of Computer Science*, University of Verona, Italy

Gaia Mari *Accurate modeling of diffuse axonal fiber degeneration with the Discreate Cosine Transform* (Expected 2027)

Publications

Submitted — D. Akarca, **S. Schiavi**, J. Achterberg, S. Genc, D. Jones, D. Astle. A weighted generative model of the human connectome. *bioRxiv* (available at `https://www.biorxiv.org/content/10.1101/2023.06.23.546237v1.abstract`)

Submitted — M. Descoteaux, K. Schilling, D.B. Aydogan, C. Beaulieu, E. Borra, M. Chamberland, A. Daducci, A. De Luca, F. Dell'Acqua, J. Dubois, T. Dyrby, S. Farquharson, S. Forkel, M. Froeling, A. Griffa, M. Grotheer, P. Guevara, S.N. Haber, V.K. Jangir, A. Leemans, J. Lefebvre, C.-P. Lin, G. Little, C.-Y. Zac Lo, C. Maffei, H.S. Mayberg, J.A. McNab, P. Mukherjee, L. O'Donnell, M. Parent, C. Pierpaoli, F. Rheault, K. S. Rockland, A. Roebroeck, A. Rokem, R.J. Rushmore, S. Sarubbo, **S. Schiavi**, S. N Sotiropoulos, D. Szczupak, M.T. de Schotten, J-D. Tournier, F. Vergani, J. Y.-M. Yang, F. Zhang, D. Jones, L. Petit. Millennium Pathways for Tractography: 40 grand challenges to shape the future of tractography.

Journal papers

2026 J.H. Legarreta, **S. Schiavi**, W. Tang, G. Banks, M. Cieslak, K. Schilling, A. De Luca, J-D. Tournier, J. Kruper, F. Rheault, S. N. Sotiropoulos, F. Pestilli, J. Veraart, J. Yuan-Mou Yang, M. Descoteaux, S. Heilbronner, A. Rokem. What needs to be standardized for reliable, reproducible, and robust tractography. *GigaScience*. DOI: 10.1093/gigascience/giag034

2025 S. Bosticardo, M. Battocchio, **S. Schiavi**, A. Zalesky, C. Granziera, A. Daducci. A multi-compartment model for pathological connectomes. *Network Neuroscience*. DOI: 10.1162/netn.a.30

2025 A. Daducci, **S. Schiavi**. Quantitative tractography: joys and sorrows. *Brain Structure and Function*. DOI: 10.1007/s00429-025-02939-z

2025 **S. Schiavi**, E. Borra, A. De Luca, D. K Jones, L. Petit, D. Szczupak. MRI and non-MRI quantifiable neuroanatomical and functional parameters are useful for tractography. *Brain Structure and Function*. DOI: 10.1007/s00429-025-02932-6

2025 A. Roebroeck, S. Haber, E. Borra, **S. Schiavi**, S. J Forkel, K. Rockland, T. B Dyrby, K. Schilling. Animal models are useful in studying human neuroanatomy with tractography. *Brain Structure and Function*. DOI: 10.1007/s00429-025-02945-1

2025 W.D. Lu, M. C Nelson, I. R Leppert, J. SW Campbell, **S. Schiavi**, G B. Pike, C. D Rowley, A. Daducci, C. L Tardif. Mapping the aggregate g-ratio of white matter tracts using multi-modal MRI. *Imaging Neuroscience*. DOI: 10.1162/IMAG.a.49

2025 A. Scaravilli, G. Mari, I. Gabusi, M. Battocchio, S. Bosticardo, **S. Schiavi**, B. Bender, C. Kessler, R. La Piana, B. P van de Warrenburg, M. Cosottini, D. Timmann, PROSPAX Consortium, B. Brais, G. Donatelli, G. De Michele, T. M Ernst, S. Klebe, I. Leppert, I. Ricca, S. Satolli, A. Traschütz, I. Willemse, A. Daducci, R. Schüle, M. Synofzik, F.M. Santorelli, S. Cocozza. An Investigation of Corticospinal Tract Microstructural Integrity in ARSACS Using a Profilometry MRI Analysis: Results From the PROSPAX Study. *European journal of neurology*. DOI: 10.1111/ene.70128

2025 G. Silvestri, L. Roccatagliata, F. Tazza, **S. Schiavi**, A. Coccia, M. Bandettini Di Poggio, M. Cellerino, A. Signori, C. Finocchi, A. Uccelli, M. Inglese, C. Lapucci. The "central vein sign" to differentiate multiple sclerosis from migraine. *Headache: The Journal of Head and Face Pain*. DOI: 10.1111/head.14902

2025 E. Cipriano, G. Boffa, N. Graziano, C. Wigley, M. Petracca, **S. Schiavi**, G.L. Mancardi, S. Klineova, F. Boada, F. Lublin, M. Inglese, Lazar Fleysher. Relationship between sodium and diffusion MRI metrics in multiple sclerosis. *Brain Communications*. DOI: 10.1093/braincomms/fcae446

2024 S. Cocozza, S. Bosticardo, M. Battocchio, L. Corben, M. Delatycki, G. Egan, N. Georgiou-Karistianis, S. Monti, G. Palma, C. Pane, Francesco Saccà, **S. Schiavi**, L. Selvadurai, M. Tranfa, A. Daducci, A. Brunetti, I. H Harding. Gradient of microstructural damage along the dentato-thalamo-cortical tract in Friedreich ataxia. *Annals of Clinical and Translational Neurology*. DOI: 10.1002/acn3.52048

2024 A. Scaravilli, I. Gabusi, G. Mari, M. Battocchio, S. Bosticardo, **S. Schiavi**, B. Bender, C. Kessler, B. Brais, R. La Piana, B. P van de Warrenburg, M. Cosottini, D. Timmann, PROSPAX Consortium, A. Daducci, R. Schüle, M. Synofzik, F. M. Santorelli, S. Cocozza. An MRI evaluation of white matter involvement in paradigmatic forms of spastic ataxia: results from the multi-center PROSPAX study. *Journal of Neurology*. DOI: 10.1007/s00415-024-12505-y

2024 C. Lapucci, V. D. Boccia, T. D. Clementi, **S. Schiavi**, L. Benedetti, A. Uccelli, G. Novi, M. Cellerino, M. Inglese. Brain lesion microstructure in neuromyelitis optica spectrum disorder and myelin oligodendrocyte glycoprotein disease. *Journal of Neuroimaging*. DOI: doi.org/10.1111/jon.13218

2024 F. Tazza, G. Boffa, **S. Schiavi**, C. Lapucci, G. F. Piredda, E. Cipriano, D. Zacà, L. Roccatagliata, T. Hilbert, T. Kober, M. Inglese, M. Costagli. Multiparametric Characterization and Spatial Distribution of Different MS Lesion Phenotypes. *American Journal of Neuroradiology*. DOI: 10.3174/ajnr.A8271

2024 I. Gabusi, M. Battocchio, S. Bosticardo, **S. Schiavi**, A. Daducci. Blurred streamlines: A novel representation to reduce redundancy in tractography. *Medical Image Analysis*. DOI: 10.1016/j.media.2024.103101

2024 S. Genc[1], **S. Schiavi**[1], M. Chamberland, C. MW Tax, E. P Raven, A. Daducci, D. K Jones. Developmental differences in canonical cortical networks: insights from microstructure-informed tractography. *Network Neuroscience*. DOI: 10.1162/netn_a_00378

2024 F. Tazza, **S. Schiavi**, E. Leveraro, M. Cellerino, G. Boffa, S. Ballerini, M. Dighero, A. Uccelli, E. Sbragia, K. Aluan, M. Inglese, C. Lapucci. Clinical and radiological correlates of apathy in Multiple Sclerosis. *Multiple Sclerosis Journal*. DOI: 10.1177/13524585231217918

2024 S. Bosticardo, **S. Schiavi**, S. Schaedelin, M. Battocchio, M. Barakovic, P-J Lu, M. Weigel, L. Melie-Garcia, C. Granziera, A. Daducci. Evaluation of tractography-based myelin-weighted connectivity across the lifespan. *Frontiers in Neuroscience*. DOI: 10.3389/fnins.2023.1228952

2023 M. C Nelson, J. Royer, W. D. Lu, I. R Leppert, J. SW Campbell, **S. Schiavi**, H. Jin, S. Tavakol, R. Vos de Wael, R. Rodriguez-Cruces, G B. Pike, B. C Bernhardt, A. Daducci, B. Misic, C. L Tardif. The human brain connectome weighted by the myelin content and total intra-axonal cross-sectional area of white matter tracts. *Network Neuroscience*. DOI: 10.1162/netn_a_00330

2023 T. Sarwar, K. Ramamohanarao, A. Daducci, **S. Schiavi**, R. E Smith, A. Zalesky. Evaluation of tractogram filtering methods using human-like connectome phantoms. *NeuroImage*. DOI: 10.1016/j.neuroimage.2023.120376

2023 I. R Leppert, P. Bontempi, C. D Rowley, J. SW Campbell, M. C Nelson, **S. Schiavi**, G B. Pike, A. Daducci, C. L Tardif. Dual-encoded magnetization transfer and diffusion imaging and its application to tract-specific microstructure mapping. *Imaging Neuroscience*. DOI: 10.1162/imag_a_00019

2023 **S. Schiavi**, M. Palombo, D. Zacà, F. Tazza, C. Lapucci, L. Castellan, M. Costagli, M. Inglese. Mapping tissue microstructure across the human brain on a clinical scanner with soma and neurite density image metrics. *Human Brain Mapping*. DOI: doi.org/10.1002/hbm.26416

2023 G. Girard, J. Rafael-Patiño, R. Truffet, D. B. Aydogan, N. Adluru, V. A Nair, V. Prabhakaran, B. B Bendlin, A. L Alexander, S. Bosticardo, I. Gabusi, M. Ocampo-Pineda, M. Battocchio, Z. Piskorova, P. Bontempi, **S. Schiavi**, A. Daducci, A. Stafiej, D. Ciupek, F. Bogusz, T. Pieciak, M. Frigo, S. Sedlar, S. Deslauriers-Gauthier, I. Kojčić, M. Zucchelli, H. Laghrissi, Y. Ji, R. Deriche, K. G Schilling, B. A Landman, A. Cacciola, G. A. Basile, S. Bertino, N. Newlin, P. Kanakaraj, F. Rheault, P. Filipiak, T. M Shepherd, Y.-C. Lin, D. G Placantonakis, F. E Boada, S. H Baete, E. Hernández-Gutiérrez, A. Ramírez-Manzanares, R. Coronado-Leija, P. Stack-Sánchez, L. Concha, M. Descoteaux, C. Seguin, A. Zalesky, K. Marshall, E. J Canales-Rodríguez, Y. Wu, S. Ahmad, P.-T. Yap, A. Théberge, F. Gagnon, F. Massi, E. Fischi-Gomez, R. Gardier, J. L. Villarreal Haro, M. Pizzolato, E. Caruyer, J.-P. Thiran. Tractography passes the test: Results from the diffusion-simulated connectivity (disco) challenge. *NeuroImage*. DOI: 10.1016/j.neuroimage.2023.120231

2023 M. Cellerino, **S. Schiavi**, C. Lapucci, E. Sbragia, G. Boffa, C. Rolla-Bigliani, S. Tonelli, D. Boccia, N. Bruschi, F. Tazza, D. Franciotta, M. Inglese. In-vivo characterization of macro-and microstructural injury of the subventricular zone in relapsing-remitting and progressive multiple sclerosis. *Frontiers in Neuroscience*. DOI: 10.3389/fnins.2023.1112199

2023 C. Lapucci, F. Tazza, S. Rebella, G. Boffa, E. Sbragia, N. Bruschi, E. Mancuso, N. Mavilio, A. Signori, L. Roccatagliata, M. Cellerino, **S. Schiavi**, M. Inglese. The role of central vein sign and diffusion MRI to differentiate microstructural features within white matter lesions of multiple sclerosis patients with comorbidities. *Frontiers in Neurology*. DOI: 10.3389/fneur.2023.1084661

2023 A. Wenger, M. Barakovic, S. Bosticardo, S. Schaedelin, A. Daducci, **S. Schiavi**, M. Weigel, R. Rahmanzadeh, P-J Lu, A. Cagol, L. Kappos, J. Kuhle, P. Calabrese, C. Granziera. An investigation of the association between focal damage and global network properties in cognitively impaired and cognitively preserved patients with multiple sclerosis. *Frontiers in Neuroscience*. DOI:10.3389/fnins.2023.1007580

2022 V.D. Boccia, C. Lapucci, M. Cellerino, F. Tazza, A. Rossi, **S. Schiavi**, M.M. Mancardi, M. Inglese. Evaluating the central vein sign in paediatric-onset multiple sclerosis: A case series study. *Multiple Sclerosis Journal*. DOI:10.1177/13524585221142319

[1]Shared first author

2022 Compressed sensing (CS) MP2RAGE versus standard MPRAGE: A comparison of derived brain volume measurements. P.M. Ferraro, L. Gualco, M. Costagli, **S. Schiavi**, M. Ponzano, A. Signori, F. Massa, M. Pardini, L. Castellan, F. Levrero, D. Zacà, G.F. Piredda, T. Hilbert, T. Kober, L. Roccatagliata. *Physica Medica*. DOI:10.1016/j.ejmp.2022.10.023

2022 M. Battocchio, **S. Schiavi**, M. Descoteaux, A. Daducci. Bundle-o-graphy: improving structural connectivity estimation with adaptive microstructure-informed tractography. *NeuroImage*. DOI: 10.1016/j.neuroimage.2022.119600.

2022 A. Mensi, **S. Schiavi**, M. Petracca, N. Graziano, A. Daducci, M. Inglese, M. Bicego. RF-Isolation: a Novel Representation of Structural Connectivity Networks for Multiple Sclerosis Classification. *CIBB 2021. Lecture Notes in Computer Science*. DOI:10.1007/978-3-031-20837-9_13

2022 E. Fischi-Gomez, G. Girard, P.J. Koch, M. Pizzolato, J. Brügger, G.F. Piredda, T. Hilbert, T. Yu, A.G. Cadic-Melchior, E. Beanato, C-H Park, T. Morishita, M. Wessel, **S. Schiavi**, A. Daducci, T. Kober, E.J. Canales-Rodríguez, F.C. Hummel, J-P Thiran. Variability and reproducibility in multi-echo T2 relaxometry: Insights from multi-site, multi-session and multi-subject MRI acquisitions. *Frontiers in Radiology*. DOI:10.3389/fradi.2022.930666

2022 M. Costagli, C. Lapucci, D. Zacà, N. Bruschi, **S. Schiavi**, L. Castellan, A. Stemmer, L. Roccatagliata, M. Inglese. Improved cortical, cervical cord and optic nerve lesion detection in Multiple Sclerosis with T2-prepared 3D Double Inversion Recovery at 3T. *Journal of Neuroimaging*. DOI: 10.1111/jon.13021

2022 I. Gabusi, G. Pontillo, M. Petracca, M. Battocchio, S. Bosticardo, T. Costabile, A. Daducci, C. Pane, E. Riccio, A. Pisani, A. Brunetti, **S. Schiavi**[2], S. Cocozza[2]. Structural disconnection and functional reorganization in Fabry Disease: a multimodal MRI study. *Brain Communications*. DOI: 10.1093/braincomms/fcac187

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2020 R. Rahmanzadeh, P.-J. Lu, M. Barakovic, M. Weigel, T.D. Nguyen, P. Spincemaille, **S. Schiavi**, A. Daducci, F. La Rosa, D.S. Reich, P. Sati, M. Bach Cuadra, E.-W. Radue, J. Kuhle, L. Kappos, Y. Wang, C. Granziera. Quantitative susceptibility mapping classifies white matter lesions with different myelin and axonal content and quantifies diffuse pathology in MS. *Multiple Sclerosis Journal*, 26: 29-30.

2020 R. Rahmanzadeh, P.-J. Lu, M. Barakovic, M. Weigel, S. Schaedelin, T.D. Nguyen, **S. Schiavi**, A. Daducci, F. La Rosa, Y. Wang, M. Bach Cuadra, E.-W. Radue, J. Kuhle, L. Kappos, C. Granziera. Advanced magnetic resonance imaging for myelin and axonal density in ms: correlation with clinical disability and serum neurofilament levels. *Multiple Sclerosis Journal*, 26: 372-372.

2020 M. Barakovic, R. Rahmanzadeh, P.-J. Lu, P. Maggi, M. Absinta, F. La Rosa, M. Bach-Cuadra, **S. Schiavi**, A. Daducci, P. Sati, D. Reich, J. Kuhle, M. Weigel, L. Kappos, C. Granziera. Studying intralesional axonal damage in ms white matter lesions with diffusion mri biophysical models. *Multiple Sclerosis Journal*, 26: 426-427.

2019 M. Battocchio, G. Girard, M. Barakovic, M. Ocampo-Pineda, J.P. Thiran, **S. Schiavi**, A. Daducci. Improving graph-based tractography plausibility using microstructure information. *CDMRI'18 Springer*. DOI: 10.1007/978-3-030-05831-9_29 .

2019 G. Boffa, A. Tacchino, E. Sbragia, **S. Schiavi** A. Droby, N. Piaggio, G. Bommarito, G. Girardi, G.L. Mancardi, G. Bricchetto, M. Inglese. Preserved Brain Functional Plasticity After Upper Limb Task-Oriented Rehabilitation in Progressive Multiple Sclerosis. *Neurology*, 92: S33.002

2019 C. Lapucci, **S. Schiavi**, E. Sbragia, G. Bommarito, M. Cellerino, L. Roccatagliata, A. Uccelli, M. Inglese, M. Pardini. The role of disconnection in explaining disability in multiple sclerosis. *Multiple Sclerosis Journal*, 25: 693-694

2019 C. Lapucci, N. Romano, **S. Schiavi**, L. Saitta, A. Signori, M.P. Sormani, G. Boffa, M. Pardini, A. Uccelli, M. Inglese, L. Roccatagliata. The importance of MRI pulse sequence selection in detecting brain hypointense lesions in multiple sclerosis. Relevance for the definition of "black holes". *Multiple Sclerosis Journal*, 25: 841

2019 G. Bommarito, R. Iandolo, L. Falcitano, **S. Schiavi**, N. Piaggio, G.L. Mancardi, M. Casadio, M. Inglese. Position sense deficits at the lower limbs in early multiple sclerosis: clinical and neural correlates. *Multiple Sclerosis Journal*, 25: 475

2019 R. Rahmanzadeh, P.J. Lu, M. Weigel, R. Galbusera, T.D. Nguyen, **S. Schiavi**, Y. Wang, F. La Rosa, M. Bach Cuadra, E.W. Radue, J. Kuhle, L. Kappos, C. Granziera. Axonal and myelin injury in white matter and cortex of relapsing-remitting and progressive multiple sclerosis patients: a combined myelin water and multi-shell diffusion MRI study. *Multiple Sclerosis Journal*, 25: 682-683

2019 R. Rahmanzadeh, P.J. Lu, M. Weigel, R. Galbusera, F. La Rosa, M. Bach Cuadra, **S. Schiavi**, E.W. Radue, J. Kuhle, L. Kappos, C. Granziera. Axonal damage explains part of and extends beyond the diffuse pathology evidenced by T1 mapping in normal-appearing white matter of multiple sclerosis patients. *Multiple Sclerosis Journal*, 25: 683-684

2019 R. Rahmanzadeh, P.J. Lu, M. Weigel, T.D. Nguyen, **S. Schiavi**, Y. Wang, E.W. Radue, J. Kuhle, L. Kappos, C. Granziera. An evaluation of axonal and myelin damage in multiple sclerosis lesions in living patients using myelin water and multi-shell diffusion MRI. *European Journal of Neurology*. 26: 245-246

2018 G. Boffa, M. Cellerino, M. Petracca, **S. Schiavi**, C. Cordano, N. Piaggio, G.L. Mancardi, G. Bommarito, A. Uccelli, M. Inglese. OCT intra-retinal layer segmentation unveils grey and white matter pathology in primary progressive MS. *Multiple Sclerosis Journal*, 24: 232-233

2018 G. Boffa, A. Tacchino, E. Sbragia, **S. Schiavi** A. Droby, N. Piaggio, G. Bommarito, G.L. Mancardi, G. Bricchetto, M. Inglese. Resting-state functional connectivity increase after upper-limb task-oriented motor rehabilitation in progressive MS. *Multiple Sclerosis Journal*, 24: 725

2018 M. Margoni, M. Petracca, **S. Schiavi**, M. Fabian, M. Inglese. Quantification of white matter tract integrity in primary-progressive multiple sclerosis: a longitudinal study. *Multiple Sclerosis Journal*, 24: 616-617

Non peer reviewed

2022 **S. Schiavi**, M. Inglese. Advanced Diffusion MRI in Neurological Diseases: The Multiple Sclerosis Model. *Siemens MAGNETOM FLASH*, 80: 1/2022.

Patents

2026 A. Capelluto, **S. Schiavi**, A. Barutti, F. Brovero. Method for winding, joining and in-line testing superconductive tapes. *WO 2026/163072 A1.* https://worldwide.espacenet.com/patent/search/family/095249153/publication/WO2026163072A1?q=pn%3DWO2026163072A1

Talks and Posters

Sept. 2026 Invited speaker at the ESMRMB 2026 precongress workshop on Microstructure Imaging with lecture titled "Imaging diffusion with MRI: from basics to state-of-the-art". https://esmrmbcongress.org/precongress-workshops/

June 2026 Invited as Expert for the IST "Ask Us Anything" online event. https://event.fourwaves.com/aua2026/pages

May 2026 Invited speaker at the EURO-PAD Scientific Symposium in Genoa with lecture titled "Imaging neuroanatomy with Diffusion MRI: from microstructure to network". https://www.symposiacongressi.com/en/euro-pad-scientific-symposium/

May 2026 Electronic E-Poster at the ISMRM annual meeting in Cape Town https://www.ismrm.org/26/26program.htm

March 2026 Oral Presentation "AI-based reconstruction of accelerated brain MRI on a unique 0.5T open-bore MR system" at the AIRMM annual meeting in Novara https://congressonazionaleairmm2026.it/Programma_AIRMM26.pdf

Feb. 2025 Invited speaker at the ISMRM Diffusion Study Group Meeting "40 Years of Diffusion: Past, Present & Future Perspectives" for the boot camp lecture on *Tractography.* https://www.ismrm.org/workshops/2025/Diffusion40/

March 2024 Invited speaker at the first Tract Anat Retreat with a Lecture titled *Challenges in Connectomics and Quantifying a Graph* https://main--societyfortractography.netlify.app/tractanat_retreat/.

Oct. 2022 Invited speaker at Virtual qMRI Conference with a Keynote Lecture titled *Diffusion MRI applications to clinic.* https://qmriconference.wixsite.com/home/2022-conference

Oct. 2022 Invited speaker at the ISMRM Diffusion Study Group Meeting "Diffusion MRI from research to Clinic" with a talk titled *Multimodal Integration for Global Tractography.* https://www.ismrm.org/workshops/2022/Diffusion/program.php

Oct. 2022 Oral Presentation at the QMR Lucca 2022 workshop. https://qmrlucca.org/wp-content/uploads/2022/11/program_qmr_lucca_final_a5_rev.pdf

June 2022 2 Poster Presentations at the Organization for Human Brain Mapping (OHBM) annual meeting. https://www.humanbrainmapping.org/files/2022%20-%20Glasgow/OHBM_2022_Glasgow_Abstracts_2.pdf

May 2022 Invited speaker for the Educational Session on Diffusion titled *Microstructure-Informed Tractography* at the International Society for Magnetic Resonance in Medicine (ISMRM) annual meeting in London. https://www.ismrm.org/22/program-files/WE-06.htm

May 2022 2 Oral Presentations at the ISMRM annual meeting in London. https://www.ismrm.org/22/22program.htm

May 2022 7 Electronic E-Posters (3 as first author) at the ISMRM annual meeting in London.https://www.ismrm.org/22/22program.htm

Nov 2021 Invited speaker at the MicroClub seminar organized by Derek K Jones (virtual meeting). https://cardiff.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=bf48efbd-8892-4961-98e1-add60119b12f

Aug. 2021 Invited speaker at minisymposia *New Mathematical Voices for Biomedicine and Neuroscience* of the SIMAI 2020-2021 annual meeting https://air.unimi.it/retrieve/handle/2434/886173/1921216/Book_Proceedings_SIMAI2020_21%20%281%29.pdf

June 2021 Poster Presentation at the OHBM annual meeting (virtual meeting). https://www.humanbrainmapping.org/files/ohbm2021_abstracts_v2.pdf

May 2021 Invited speaker at "Selected research topics in Biomedical Engineering: Novel Approaches in Neurodegenerative Diseases", University of Basel (virtual course for master and phd students) https://vorlesungsverzeichnis.unibas.ch/en/investigation?id=259279

May 2021 3 Oral Presentations (1 as first author) at the ISMRM annual meeting online. https://cds.ismrm.org/protected/21MProceedings/SearchResults.php?Institution=&Room_Session=&Program_Number=&Session_Name=&Topic=&Session_Date=&Session_Type=&Author=Schiavi%2C+Simona&Title=

May 2021 5 Electronic E-Posters at the ISMRM annual meeting online. https://cds.ismrm.org/protected/21MProceedings/SearchResults.php?Institution=&Room_Session=&Program_Number=&Session_Name=&Topic=&Session_Date=&Session_Type=&Author=Schiavi%2C+Simona&Title=

Dec. 2020 Invited speaker at the XI Congresso AIRMM satellite event *Myelin imaging: state of the art and challenges!*. https://bvent.biomedia.net/gestionale/documenti/evento/3050/programma.pdf

Nov. 2020 Oral Presentation at the Brayn conference 3nd Brainstorming Research Assembly for Young Neuroscientists (virtual meeting). https://www.braynassociation.com/brayn-2020-edition/

Nov. 2020 Poster at the Brayn conference 3nd Brainstorming Research Assembly for Young Neuroscientists (virtual meeting).https://www.braynassociation.com/brayn-2020-edition/

Sept. 2020 Invited speaker at the Think's Neuroimaging meeting, University of Basel.

Sept. 2020 Oral Presentation at Big Data Neuroscience Workshop 2020: Organized by the Advanced Computational Neuroscience Network (ACNN) virtual meeting. https://neurosciencenetwork.org/ACNN_Workshop_2020.html

Aug. 2020 Oral Presentation at the ISMRM annual meeting (virtual meeting). https://www.ismrm.org/20/TOCNoLink.pdf

Aug. 2020 Power Pitch at the ISMRM annual meeting (virtual meeting). https://www.ismrm.org/20/TOCNoLink.pdf

Aug. 2020 5 Electronic E-Posters at the ISMRM annual meeting (virtual meeting). https://www.ismrm.org/20/TOCNoLink.pdf

June 2020 2 Poster Presentations at the OHBM annual meeting (virtual meeting). https://www.humanbrainmapping.org/files/2020/OHBM_2020_Virtual_Abstracts_2.pdf

Nov. 2019 Poster at the Brayn conference 2nd Brainstorming Research Assembly for Young Neuroscientists in Milan. https://www.braynassociation.com/brayn-2019-edition/

May 2019 Invited speaker at *Multi-Scale Imaging of the White Matter Anatomy* workshop in Montreal. http://hardi.epfl.ch/static/events/2019_Mtl_Workshop/program.html

May 2019 Power Pitch at the ISMRM annual meeting in Montreal. https://cds.ismrm.org/protected/19MProceedings/SearchResults.php?Computer_Number=&Room_Number=&Program_Number=&Session_Name=&Session_Time=&Session_Date=&Session_Type=&Institution=&Author=Schiavi%2C+Simona&Title=

May 2019 4 Electronic E-Posters at the ISMRM annual meeting in Montreal.https://cds.ismrm.org/protected/19MProceedings/SearchResults.php?Computer_Number=&Room_Number=&Program_Number=&Session_Name=&Session_Time=&Session_Date=&Session_Type=&Institution=&Author=Schiavi%2C+Simona&Title=

Jan. 2019 Invited speaker at the CUBRIC seminar, University of Cardiff.

Oct. 2018 Invited speaker at the DeFI group's seminar at CMAP, École Polytechnique Paris.

June 2018 Electronic E-Poster at the ISMRM-ESMRMB annual meeting in Paris. https://cds.ismrm.org/protected/18MProceedings/SearchResults.php?Computer_Number=&Room_Number=&Presentation_Time=&Program_Number=&Session=&Session_Time=&Session_Date=&Session_Type=&Author_Institution=&Author=Schiavi%2C+Simona&Title=

March 2017 Invited speaker at MIDA group's seminar, University of Genoa.

Sept. 2016 Poster at the ISMRM workshop Breaking the Barriers of Diffusion MRI in Lisbon. https://www.ismrm.org/workshops/Diffusion16/program.htm

May 2016 Electronic E-Poster at the ISMRM annual meeting in Singapore. https://cds.ismrm.org/protected/16MProceedings/SearchResults.php?Program_Number=&Session=&Session_Date=&Session_Type=&Author=Schiavi%2C+Simona&Title=

June 2015 Electronic E-Poster at the ISMRM annual meeting in Toronto. https://www.ismrm.org/15/2015_ISMRM_program_book.pdf

June 2015 Invited speaker for the *Diffusion MRI* mini-symposium at SMAI annual meeting in Les Karellis, Savoie. http://smai.emath.fr/smai2015/

Feb. 2015 Invited speaker at the PhD's seminar of CMAP, École Polytechnique Paris.

Funding and Grants

2023 Co-Investigator of the project "Functionally and Anatomically Informed Tractography of the Human brain (FAITH)" 2022PXR8ZX founded by PRIN (PROGETTI DI RICERCA DI RILEVANTE INTERESSE NAZIONALE) – Bando 2022. https://www.mur.gov.it/it/atti-e-normativa/decreto-direttoriale-n-978-del-3-07-2023

2022 Winner of "Borse di studio GIDRM Stefano Caldarelli" to support participation at QMR Lucca 2022 workshop.

2021 Collaborator of the PROSPAX consortium under the frame of EJP RD, the European Joint Programme on Rare Diseases, under the EJP RD COFUND-EJP No. 825575.

2020 Co-Investigator in the project "Exploring pathogenic mechanisms associated with depression in multiple sclerosis: functional and structural disconnectivity of neurotransmitter-related nuclei" founded by FISM. Reference Number 2020/R-Single/027

2020 Collaborator of Prof. M. Inglese project "MRI predictors of disease and disability progression in African-Americans with MS" number R01 NS100811 funded by NINDS/NIH.

2019 Co-Investigator in the project "Non-invasive microstructure characterization of peripheral nerve in humans by ultra-high field 7T MRI" founded by the Brain Research Foundation Verona Onlus

2019 CooperInt mobility grant to visit CUBRIC laboratory at Cardiff University for 2 months.

2019 Collaborator of Prof. M. Inglese and L. Fleysher's project "Examining the role of brain sodium content in MS using MRI" number R01 NS099527 funded by NINDS/NIH.

2018 CooperInt mobility grant to visit LTS5 laboratory at EPFL Lausanne for 2 months.

2018 Collaborator of Prof. M. Inglese project "Multimodal longitudinal Imaging in progressive MS" RG 4916A2/1 funded by National MS Society.

2018 Educational Stipend for Trainees to participate at ISMRM annual meeting in Paris.

2013-2016 INRIA's fellowship for the PhD program.

2016 Educational Stipend for Students to participate at ISMRM annual meeting in Singapore.

2015 Educational Stipend for Students to participate at ISMRM annual meeting in Toronto.

2013 Educational Stipend for Students to participate at the Multimodal Neuroimaging workshop at IPAM, University of California Los Angeles.

2012 Stipend to attend the summer school of Scuola Matematica Interuniversitaria di Perugia.

Awards

March 2023 Honorary Research Fellow, Cardiff University (UK)

May 2021 Award for "best trainee oral presentation in Neuro" from ISMRM Diffusion Study Group at ISMRM annual meeting. `https://groups.ismrm.org/diffusion/`

May 2021 Awarded ISMRM Junior Fellow for 2021. `https://www.ismrm.org/21m/junior-fellows/`

May 2021 *Summa Cum Laude* award for the oral presentation: "Unique insights into visual network development over childhood and adolescence from microstructure informed tractography" at ISMRM annual meeting. `https://www.ismrm.org/21/21-Summa.pdf`

Aug. 2020 *Magna Cum Laude* award for the oral presentation: "Myelin weighted tractography: a new way to investigate bundles myelination in-vivo?" at ISMRM annual meeting `https://www.ismrm.org/20/20_Magna.pdf`

Aug. 2020 *Magna Cum Laude* award for the Power Pitch presentation: "Comparison of microstructural models of Sodium and Diffusion Basis Spectrum Images" at ISMRM annual meeting `https://www.ismrm.org/20/20_Magna.pdf`

Sept. 2019 Member of the Tracky McTrackface team winning the IronTract challenge 2019. `https://irontract.mgh.harvard.edu`

May 2019 Award for "best trainee d-poster" from ISMRM Diffusion Study Group at ISMRM annual meeting. `https://groups.ismrm.org/diffusion/`

2009-2013 Award for meritorious students of Università degli studi di Genova.

Society

2024- Member of IST (International Society for Tractography)

2015- Member of AIRMM (Associazione Italiana Risonanza Magnetica in Medicina).

2015- Member of ISMRM (International Society for Magnetic Resonance in Medicine).

2015- Member of ESMRMB (European Society for Magnetic Resonance in Medicine and Biology).

2017-2021 Member of OHBM (Organization for Human Brain Mapping).

2021-2022 Member of SIMAI (Italian Society of Industrial and Applied Mathematics)

2015-2017 Junior member of SMAI (Société de Mathématique Appliquées et Industrielles).

Computer Skills

Platforms OS X, Linux, Windows.

Languages bash, C/C++, C#, FreeFem++, HTML, LaTex, PHP, Python.

Tools AutoCad, Freesurfer, FSL, Maple, Matlab, MRtrix3, Office Suite, SPM, ANTs, SPSS.

Languages

Italian Mother Tongue

English Professional in oral, reading and writing skills *PET, Trinity Level 6 certificates pass with merit*

French Advanced in oral and reading skills

Editorial Board

2022-now **Review Editor**, *"Artificial Intelligence in Radiology"*, Frontiers in Radiology, https://loop.frontiersin.org/people/1185442/overview

2021-now **Review Editor**, *"Brain Imaging Methods"*, Frontiers in Neuroimaging, https://loop.frontiersin.org/people/1185442/overview

2021-now **Review Editor**, *"Brain Imaging Methods"*, Frontiers in Neuroscience, https://loop.frontiersin.org/people/1185442/overview

2021 **Guest Associate Editor**, *Article Collection in Frontiers in Radiology, Impact of Inflammation, Neurodegeneration and Tissue Repair on the Clinical Expression and Progression of Neurological and Psychiatric Disorders* *https://www.frontiersin.org/research-topics/60256/impact-of-inflammation-neurodegeneration-and-tissue-repair-on-the-clinical-expressio*

Organization of academic events

Oct. 2025 **Organizing and Scientific Committee**, *Inaugural Conference of the International Society for Tractography (IST)*, Bordeaux, France. https://event.fourwaves.com/istconference2025/pages

Oct. 2025 **Programme Committee**, *CDMRI'25*, MICCAI 2025 International Workshop on Computational Diffusion MRI, Member of the programme committee

Oct. 2024 **Programme Committee**, *CDMRI'24*, MICCAI 2024 International Workshop on Computational Diffusion MRI, Member of the programme committee

Oct. 2023 **Programme Committee**, *CDMRI'23*, MICCAI 2023 International Workshop on Computational Diffusion MRI, Member of the programme committee

Oct. 2022 **Programme Committee**, *CDMRI'22*, MICCAI 2022 International Workshop on Computational Diffusion MRI, Member of the programme committee http://cmic.cs.ucl.ac.uk/cdmri22/organisers.html

2022-now **Scientific Committee**, *Brayn Conference*, Italy, Member of the organizing scientific committee of the Brayn Conference. https://www.braynconference.com/mission/scientific-committee/

Oct. 2021 **Programme Committee**, *CDMRI'21*, MICCAI 2021 International Workshop on Computational Diffusion MRI, Member of the programme committee http://cmic.cs.ucl.ac.uk/cdmri21/organisers.html

May 2021 **Conference moderator**, *ISMRM annual meeting 2021*, online, Served as moderator for the combined educational and scientific session "Diffusion Tractography" during the ISMRM annual meeting. https://www.ismrm.org/21/program-files/CES-12A.htm

Jan. 2021 **Organizing Committee**, *Brainhack*, Member of the organizing committee of the Brainhack Micro2Macro 2021. https://brainhack-micro2macro.github.io

2020-now **Organizing Committee**, *Brayn Conference*, Italy, Member of the organizing committee of the Brayn Conference. https://www.braynconference.com/about-us/

June 2020 **Organizing Workshop Committee**, *Multi-Modal Connectivity Imaging of the Central Nervous System, Montreal, Canada*, Member of the organizing committee of the workshop, http://hardi.epfl.ch/static/events/2020_Mtl_Workshop
Canceled due to COVID-19

May 2019 **Organizing Workshop Committee**, *Multi-Scale Imaging of the White Matter Anatomy Workshop*, Montreal, Canada, Member of the organizing and scientific committee of the workshop
http://hardi.epfl.ch/static/events/2019_Mtl_Workshop

June 2018 **Conference moderator**, *Axon Diameter Mapping with dMRI*, Paris, France, Served as moderator for two scientific sessions during the workshop organized by LTS5-EPFL Lausanne `http://hardi.epfl.ch/static/events/2018_ADMworkshop/`

Other experiences

2008-2012 **Scientific entertainer**, *Festival della Scienza*, Genoa, Italy
Scientific dissemination of mathematical topics at Science Festival in Genoa.