

## Scientific committee and invited speakers

### Scientific committee :

Persons coming from different domains and backgrounds will compose the summer school scientific committee:



**Philippe Robert** (health domain) is professor of Psychiatry at the Nice School of Medicine, Director of the Nice Memory Centre for Care and Research (CMRR), Director of the Cognition, Behaviour & Technology Unit (CoBTeK) at the University of Nice-Sophia Antipolis, and coordinator of the French National Alzheimer data bank. His domains of expertise include behavioral and psychological symptoms of dementia, apathy assessment and treatment, and the use of new technologies for diagnosis and stimulation in elderly people. Philippe Robert is with Nicholas Ayache the coordinator of the Idex<sup>Jedi</sup> MNC<sup>3</sup> project.



**Nicholas Ayache** (technology domain) is Research Director at INRIA where he leads the EPIONE project-team whose research activities are focusing on the Analysis and Simulation of Biomedical Images. This includes the analysis of medical and biological images with advanced geometrical, statistical, physical and functional models, the simulation of physiological systems with computational models built from biomedical images and other signals, and the application of these tools to medicine and biology to better assist prevention, diagnosis and therapy of diseases. Nicholas Ayache is with Philippe Robert the coordinator of the Idex<sup>Jedi</sup> MNC<sup>3</sup> project.



**François Brémond** (technology domain) is a Research Director at INRIA Sophia Antipolis. He created the STARS team on the 1st of January 2012. He obtained his Master degree from ENS Lyon. He has conducted research work in video understanding since 1993 both at Sophia-Antipolis and at USC (University of Southern California), LA. In 1997 he obtained his PhD degree from INRIA in video understanding and he obtained in 2007 his HDR degree (Habilitation à Diriger des Recherches) from Nice University on Scene Understanding: perception, multi-sensor fusion, spatio-temporal reasoning and activity recognition. He is co-director of CoBTeK team.



**Susanne Thümmeler** (health domain) is a medical doctor in the University Department of Child and Adolescent Psychiatry and the Autism Resources Center of Nice. She coordinates the research group 'Neurodevelopment and Child Psychiatry' of the CoBTek laboratory with Pr Florence Askenazy. Specialized in child neurology and child psychiatry, with a PhD in Pharmacology and Neurosciences (Leipzig University, Germany, with a fellowship at Colorado University, USA), she completed her scientific formation with a postdoctoral fellowship in Neuroscience at the Institute of Molecular and Cellular Pharmacology at Sophia Antipolis (CNRS). Her special interests are translational and transversal medical research combining clinical child and adolescent psychiatry with neuropsychology, biology, imaging as well as technology.



**Joseph Sfeir** (business domain) is Director of Business Development at LitePoint, California. Joseph brings 10 years of international experience in engineering, marketing and business development for high tech companies. He is also an active investor in medical startup. He holds an MBA and a degree in Electronic engineering.

## Summer school coordinator :



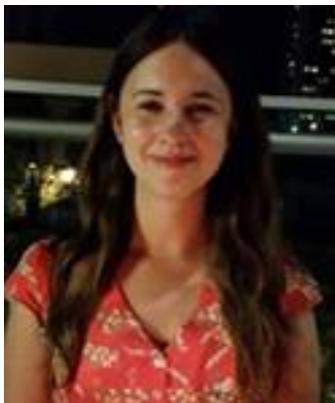
**Valeria Manera** (health and research domain) is a postdoctoral fellow at the INRIA (STAR team) and the CoBTek unit of the University of Nice-Sophia Antipolis (France). She has a Master degree in Clinical Psychology and a PhD in Cognitive Science. She spent long research periods at the University of Leuven (Belgium) and at the Stanford Psychophysiology Laboratory (California). Her domains of expertise include biological motion perception, emotion recognition and regulation in different neuropsychiatric pathologies, the use of Virtual Reality in older adults, and dementia prevention.

## Guest speakers :



**Maarten De Vos** (Director of the Oxford Biodesign Programme) is Associate Professor at the IBME, in the University of Oxford, following a Junior Professorship at the University of Oldenburg, Germany. His academic work focuses on innovative biomedical monitoring and signal analysis, in particular the derivation of biosignatures of patient health from data acquired via wearable sensors and the incorporation of smart analytics into unobtrusive systems.

He has a strong interest in translational research and consults for different digital health and medical innovation companies. His pioneering research in the field of mobile real-life brain-monitoring led to the formation of mBrainTrain, which he supported with scientific advice and which has won several prizes for their mobile EEG innovation. His work on neonatal brain monitoring also achieved impact in patient care through the Neoguard implementation project. After successful completion of the Biodesign faculty training at Stanford University, he started the Oxford Biodesign programme.



**Patricia Lockwood** (University of Oxford, Medical research council fellow) - BSc Psychology and Philosophy (2010), PhD Biomedical Sciences (2015).

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My research investigates the psychological and neural mechanisms that underpin how we interact with other people. As part of this aim, I examine how our ability to interact with others is affected by factors such as personality, ageing and psychiatric and neurological disorders including conduct problems, stroke and Parkinson's Disorder. I use a range of methods including questionnaires, behavioural paradigms, functional magnetic resonance imaging, neuropsychological studies and computational modelling.



**Sylvie Serret** conduct is a child psychiatrist at Autism Resource Center hospital for Lenval – Nice. It's research activities within CoBTeK focuses on the development of serious games for children with developmental disorders.



**Baptiste Fosty** is the CEO of Ekinnox, a startup stemming from Inria Sophia Antipolis. With a master degree in Artificial Intelligence and 5 years spent in STARS team of Inria, he created Ekinnox to develop and commercialize a medical device to improve the treatment of patients in rehabilitation by simplifying gait analysis. He is in charge now of the businesses aspects (strategy, finance, commercial, marketing, administration) while his main partner, Méline Gautier, is responsible for the technical development of the solution.



**Sarah Parsons** is Professor of Autism and Inclusion, and Director of Research for Southampton Education School, at the University of Southampton. She has significant research experience in disability related projects and particular interests in the use of innovative technologies for children with autism, evidence-based practices in autism, and research ethics relating to children and young people. Sarah is especially interested in working in collaboration with others in the context of participatory design and inclusive research. Sarah has recently led the ESRC-funded seminar series: 'Innovative technologies for autism – critical reflections on digital bubbles' ([www.digitalbubbles.co.uk](http://www.digitalbubbles.co.uk)), and has established ACoRNS: the Autism Community Research Network at Southampton (<http://acornsnetwork.org.uk/>). She is also a partner on the H2020 project ProsocialLearn: <http://prosociallearn.eu/>



**Paul Mears** (Crypto Investor, Monte-Carlo, Monaco) Passionate tech, bio and innovation investor with experience of working in a variety of finance and operational roles in UK, Amsterdam, Hong Kong, USA, Canada and Monaco in a range of companies from start up to multinationals including hedge fund, telco, construction, software.

Angel investor with portfolio of Biotech, Med Devices , Apps, Payments and since 2016 active in crypto as an investor and advisor to Initial Coin Offerings including Humaniq, Modex, Varcrypt, Howdoo, Jointo and more.



**Antitza Dantcheva** is a Postdoctoral Fellow at the STARS team, INRIA, France. Previously, she was a Marie Curie fellow at INRIA and a Postdoctoral Fellow at the Michigan State University and the West Virginia University, USA. She received her PhD in Signal and Image Processing in 2011 from Eurocam / Telecom ParisTech in France. In 2017 she has received the French National Research project “Automated holistic human analysis”. She was the recipient of the Best Presentation Award in ICME 2011, the Best Poster Award in ICB 2013, the Tabula Rasa Spoofing Award in 2013, as well as the Best Paper Award (Runner Up) at the IEEE ISBA 2017. Her research interests are in automated facial analysis for healthcare and security.



**Thomas Lorivel** is PhD in Neuroscience, specialized in animal behaviour. He is the head of the functional exploration platform at IPMC – UMR7275, where he contributes to the work of the teams interested in neurodegenerative or neurodevelopmental diseases as Alzheimer disease, Parkinson disease or autism spectrum disorder.



**Marco Lorenzi** (technology domain) is a tenured research scientist (CR2) at Université Côte d’Azur, Inria Sophia Antipolis. He obtained his PhD from the University of Nice in 2012, and from 2014 to 2016 worked as research associate in the Centre for Medical Image Computing of the Biomedical Engineering Department of University College London, UK. His research interest is in the development of computational and statistical methods for the joint analysis of biomedical data and brain images, with application to the study of neurodegenerative disorders. He is also interested in the statistical analysis of clinical trials data, time-series analysis, and in the latest advances in machine learning for the analysis of high dimensional data.