Christian O'Reilly, PhD

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Bio: Christian O'Reilly received his B.lng (electrical eng.; 2007), his M.Sc.A. (biomedical eng.: 2011), and his Ph.D. (biomedical eng.: 2012) from the École Polytechnique de Montréal where he worked under the mentoring of Pr. R. Plamondon to apply pattern recognition and machine learning to predict brain stroke risks. He was later a postdoctoral fellow in Pr. T. Nielsen's laboratory at the Center for Advanced Research in Sleep Medicine of the Hôpital du Sacré-Coeur/Université de Montréal (2012-2014) and then a NSERC postdoctoral fellow at McGill's Brain Imaging Center (2014-2015) where he worked in Pr. Baillet's laboratory on characterizing EEG sleep transients, their sources, and their functional connectivity. During this period, he also was a visiting scholar in Pr. K. Friston's laboratory at the University College of London in order study effective connectivity during sleep transients using the Dynamic Causal Modelling approach. He later took on a 6-month fellowship with the Pr. M. Elsabbagh on functional connectivity in autism after which he moved to Switzerland to work for the Blue Brain project (Pr. S. Hill; EPFL; 2015-2018) where he led efforts on large-scale biophysically detailed modelling of the thalamocortical loop. Since 2020, he resumed his collaboration with the Dr. Elsabbagh as a research associate at the Azrieli Centre for Autism Research (McGill) where he is studying brain connectivity in autism and related neurodevelopmental disorders.