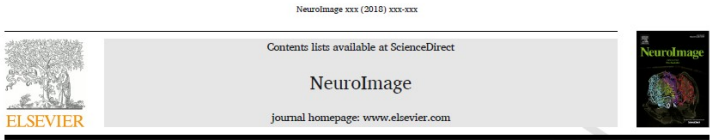


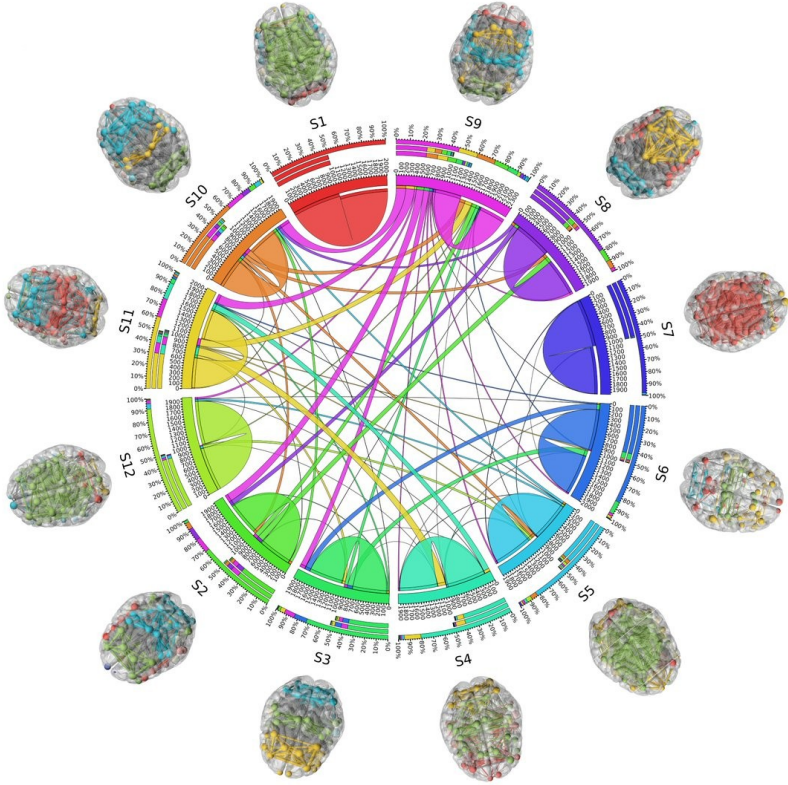
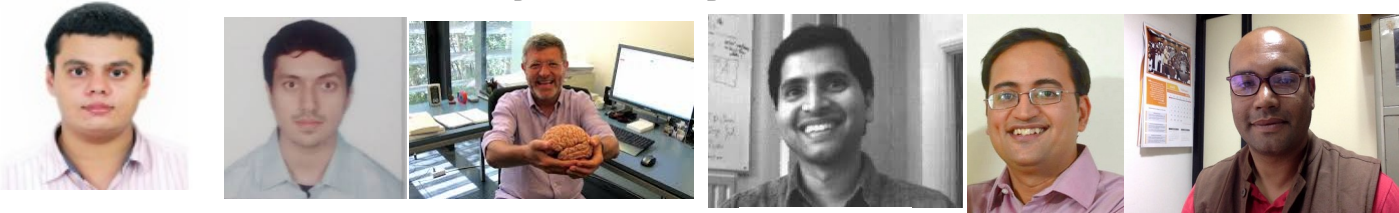
Resting state dynamics and Brain state switching predicted using machine learning



Resting state dynamics meets anatomical structure: Temporal multiple kernel learning (tMKL) model

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This work provides insight for the first time about the tripartite relationship between structure-dynamics-function in the human brain during spontaneous activity in the task free condition. Using machine learning approach this work for the first time make prediction of subject specific brain state and connectivity switching with high classification accuracy surpassing what can be explained within existing frameworks. Further, learning state transition probability and occupation index in a given brain state allow us to characterize Cognitive Brain Dynamics and brain state transition during maturation, age-specific reorganization in the brain.