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# Brain Activity Exploration with Non-invasive Sensor Arrays

Guest Editors:

#### **Message from the Guest Editors**

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Dear Colleagues,

Brain activity exploration has been a part of the multinational research agenda for several decades. Network models currently dominate and postulate the existence of dynamic functional connections between spatially distributed neuronal assemblies at a range of different scales, which manifests the need for hardware and software solutions capable of concurrently sensing the distributed neuronal populations and extracting regularities present in the measured data.

Capitalizing on the recent explosive technological developments in material science, microfabrication, and big data analysis, it is now time for a new twist in the spiral of developing novel tools for sensing brain activity. Given the need to register the activity of neural networks whose nodes are spread across the brain volume, non-invasive whole-brain imaging approaches are of specific interest, and are capable of registering the activity of cortical and subcortical sources at various spatial and temporal resolution scales.

More infomation please visit here

Dr. Alexei Ossadtchi Dr. Anton Vershovskii Dr. Guido Nolte *Guest Editors* 

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#### Message from the Editor-in-Chief

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