Precise Electrical Stimulation of the Human Brain

Medical Motivation:

Stimulation of the human brain to modulate primary motor function (e.g. Parkinson's disease) and higher cognitive brain function.



Transcranial Direct Current Stimulation (tDCS)

tDCS Applications, e.g.





Project: Optimizing injected current patterns using regular electrode arrays



Patch electrodes



Comparison of EGI and patch electrodes



Potential distribution mapped on anatomical surfaces (V/m*m)

SCI Contributors



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Non-invasive

Stroke rehabilitation

Mood disorders





Sponge electrodes (EGI)

Generate tDCS Forward solution







