

This study explores the analysis of EEG signals to understand brain microstates and their dynamics in schizophrenia. Key aspects include:

1. **Transition Matrix and Graphs:** Creation of transition matrices and directed graphs to quantify and visualize EEG-derived microstate transitions in individuals with schizophrenia and healthy controls.
2. **Motif Analysis:** Identification of recurring microstate transition patterns (motifs) within the complex networks, offering insights into neural circuitry differences in schizophrenia.
3. **Comparative Analysis:** Utilization of statistical methods to compare motif distributions between groups, highlighting motifs that significantly differ in schizophrenia.
4. **Implications:** The study discusses how certain EEG microstate motifs could serve as potential biomarkers for schizophrenia, aiding in diagnostics and therapeutic strategies.

This research integrates statistical techniques and graph theory.