



Contribution ID: 54

Type: **not specified**

## Induced Partial and Mixed synchronization in Chain-Fractance system

*Monday, 27 May 2024 16:45 (10 minutes)*

A general procedure for targeting and controlling synchronization in chain-fractance configuration is designed bidirectionally and unidirectionally. The appropriate open-plus-closed-loop coupling criterion are employed to induce mixed and partial synchronization, respectively. Transitions from anti-synchronization, amplitude death and complete synchronization were realized by varying the scaling factor embedded in the coupling function. The tunable matrix element in the matrix type coupling is also used to achieve the desired synchronization. Finally, the electronic software simulation confirm the theoretical analysis and numerical simulation.

**Primary author:** Dr ADELAKUN, Adedayo (Federal University of Technology, Akure, Ondo State, Nigeria)

**Co-author:** Mr ADEYERI, Joshua

**Presenter:** Mr ADEYERI, Joshua

**Session Classification:** Technical session 1