

# On multi-agent systems with the generalized Caputo derivative under Denial-of-Service attacks

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The talk is devoted to multi-agent systems with memories under denial-of-service (DoS) attacks. The memory is represented by the fractional derivative that appears in the dynamics of the considered systems. The problem that we aim to address is, under which conditions the system continues to be stable or is in consensus mode, despite DoS attacks. Solutions to these problems are proposed in the presented theorems. We strengthen the theoretical considerations with numerical simulations.