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## Analysis of Coupled Caputo–Hadamard Hybrid Fractional Differential Equations in a Bounded Domain

### Communication Info

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### Abstract

In this work, we investigate the existence and uniqueness of solutions for a system of two coupled hybrid fractional differential equations involving the Caputo–Hadamard (C–H) derivative. The analysis relies mainly on the Banach contraction mapping principle and Schaefer’s fixed point theorem. Furthermore, the Ulam–Hyers stability concept is employed to establish the stability of the obtained solutions. Finally, an illustrative example is provided to demonstrate the applicability of the theoretical results.

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