

*Dedicated to Professor Yeol Je Cho on the occasion of his retirement*

## Coupled coincidence and coupled common fixed point theorems on a fuzzy metric space with a graph

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### ABSTRACT.

Inspired by the work of Dakjum et al. [Eshi, D., Das, P. K. and Debnath, P., *Coupled coincidence and coupled common fixed point theorems on a metric space with a graph*, Fixed Point Theory Appl., **37** (2016), 1–14], we introduce a new class of  $G - f$ -contraction mappings in complete fuzzy metric spaces endowed with a directed graph and prove some existence results for coupled coincidence and coupled common fixed point theorems of this type of contraction mappings in complete fuzzy metric spaces endowed with a directed graph.

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