ON COUPLED COINCIDENCE POINT FOR THREE MAPPINGS IN
PARTIALLY ORDERED METRIC SPACES

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ABSTRACT
A coupled fixed point theorem for non-linear contraction is established for three self maps by using concept of mixed monotone mappings in partially ordered metric spaces. The result generalizes the recent fixed point theorem of V. Lakshmikantham and Ljubomir Ciric[7] and includes several recent developments.

Keywords: Coupled fixed point, Coupled coincidence point, Coupled common fixed point, Partially ordered set, Mixed monotone mapping

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REFERENCES
J. Harjani, K. Sadarangani, Fixed point theorems for weakly contractive mappings in partially ordered sets, Nonlinear Anal. 71. 2009, 3403-34.
V. Lakshmikantham, Ljubomir Ciric, Coupled fixed point theorems for non linear contractions in partially ordered metric spaces. Nonlinear Analysis Vol 70. 2009, 4341-4349.