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APPROXIMATING COINCIDENCE POINTS BY α-DENSE CURVES

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Abstract. The purpose of this paper is to show, under suitable conditions, an iterative procedure which if converges, the limit point is a coincidence point of two given itself mappings defined in a subset of a metric space. Also, under additional conditions, the convergence of proposed iterative procedure holds. Our main tool will be the so called α-dense curves, which allow us to construct such procedure in a stable way, in the specified sense, providing also a bound for the error approximation at each iteration. To justify our result, we will analyze certain integral equations of Volterra type.
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