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Particle Swarm Optimization Of Fuzzy Penalty For 3D Image Reconstruction In X-Ray

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Abstract : Engineers last year's works only on the 2D image data, to perceive defects in the CT images. This was a handicap facing the challenge of determining the 3D exact defect form. This paper presents a method for 3D image reconstruction, the most interesting in non destructive testing (NDT) especially due to its application in industrial imaging. We propose a new combined approach using particle swarm optimization (PSO) and fuzzy inference penalty, which will be helpful to elevate the hard inverse problem of 3 D computed tomography