

1075-49-170

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*Comparison of Variational Models for Denoising of Images.* Preliminary report.

Several variational models have been proven useful for the denoising of natural images. The most prominent ones include the Rudin Osher Fatemi model and higher-order models. They usually consist of a fidelity term and a regularization term where the two terms are weighted by a regularization parameter to be chosen a priori. In this talk, we compare recovery and stability properties of various variational models. This includes the impact of noise in the data, consistency properties and the numerical computability of approximations. (Received August 29, 2011)