

Coupling decimation and subdivision schemes for non linear multiresolutions

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The plugging of non linear subdivision schemes ([1]) in a multiresolution framework ([2]) requires the definition of (non linear) decimation schemes sharing a consistency condition. A general method has been recently developped in ([3]) to construct a large family of consistent decimations for a given subdivision. For practical issues, it is necessary to introduce a criterion of selection in order to define the multiresolution transforms. We will present the constructions of the decimations ([3]) and the analysis of the multiresolutions. Then we will compare different criteria in term of efficiency of the resulting multiresolutions. Numerical applications will be performed in the framework of non linear approximation of images.

Joint work with: Zhiqing Kui, Jean Baccou.

References

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