

Fast Evaluation of Thin-Plate Splines on Fine Square Grids.

Petr Luner; Jan Flusser

Abstract: The paper deals with effective calculation of Thin-Plate Splines (TPS). We present a new modification of hierarchical approximation scheme. Unlike 2-D schemes published earlier, we propose an 1-D approximation. The new method yields lower computing complexity while it preserves the approximation accuracy.

Keywords: Thin-Plate Spline; fast evaluation; subtabulation;

AMS Subject Classification: 65D07; 65D18 ;