CI06-003 - Mathematical Methods for Image Analysis and Processing in the Visual Arts

Zusammenfassung

This project develops new tools for the implementation of real world applications in the realm of mathematical imaging and vision, restoration of paintings and creative production of visual artwork. In particular we shall develop sophisticated inpainting tools for virtual wall fresco restoration based on variational techniques, work on fourth order partial differential inpainting models and on image segmentation by level-set and free boundary techniques. Also we shall analyse and implement a class nonlinear diffusive second order differential equations for image smoothing, which will be used to retouch high resolution digital images and to produce creative modifications of light installations of large interior and exterior environments.

Schlagworte:
nonlinear partial differential equations, variational methods,digital image analysis and processing, inpainting, frescorestoration, light installations, retouching of photographicimages

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Status: Abgeschlossen (01.11.2006 – 31.10.2010)

Weiterführende Links zu den beteiligten Personen und zum Projekt finden Sie unter
https://www.wwtf.at/funding/programmes/past/ci/CI06-003/