Keywords: Convex-relaxation

List of Publications

Journal Articles

[J1] B. Goldluecke, M. Aubry, K. Kolev and D. Cremers,
A Super-resolution Framework for High-Accuracy Multiview Reconstruction,

[J2] E. Strekalovskiy, A. Chambolle and D. Cremers,
Convex Relaxation of Vectorial Problems with Coupled Regularization,

[J3] C. Nieuwenhuis and D. Cremers,
Spatially Varying Color Distributions for Interactive Multi-Label Segmentation,

[J4] C. Nieuwenhuis, E. Toeppe and D. Cremers,
A Survey and Comparison of Discrete and Continuous Multi-label Optimization Approaches for the Potts Model,

[J5] B. Goldluecke, E. Strekalovskiy and D. Cremers,
Tight Convex Relaxations for Vector-Valued Labeling,

[J6] A. Chambolle, D. Cremers and T. Pock,
A Convex Approach to Minimal Partitions,

[J7] D. Cremers,
Optimal Solutions for Semantic Image Decomposition,

[J8] B. Goldluecke, E. Strekalovskiy and D. Cremers,
The Natural Total Variation Which Arises from Geometric Measure Theory,

[J9] K. Kolev, T. Brox and D. Cremers,
Fast Joint Estimation of Silhouettes and Dense 3D Geometry from Multiple Images,

[J10] D. Cremers and E. Strekalovskiy,
Total Cyclic Variation and Generalizations,

[J11] D. Cremers and K. Kolev,
Multiview Stereo and Silhouette Consistency via Convex Functionals over Convex Domains,

[J12] T. Pock, D. Cremers, H. Bischof and A. Chambolle,
Global Solutions of Variational Models with Convex Regularization,
Keywords: Convex-relaxation 

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[J13] K. Kolev, M. Klodt, T. Brox and D. Cremers, 
Continuous Global Optimization in Multiview 3D Reconstruction, 

[J14] J. Keuchel, C. Schnörr, C. Schellewald and D. Cremers, 
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Book Chapters

[BC1] M. Klodt, F. Steinbruecker and D. Cremers, 
Moment Constraints in Convex Optimization for Segmentation and Tracking, 

[BC2] D. Cremers, T. Pock, K. Kolev and A. Chambolle, 
Convex Relaxation Techniques for Segmentation, Stereo and Multiview Reconstruction, 

Conference and Workshop Papers

[C1] T. Möllenhoff and D. Cremers, 
Sublabel-Accurate Discretization of Nonconvex Free-Discontinuity Problems, 
International Conference on Computer Vision (ICCV), Venice, Italy, October 2017.

[C2] T. Möllenhoff, E. Laude, M. Moeller, J. Lellmann and D. Cremers, 
Sublabel-Accurate Relaxation of Nonconvex Energies, 
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[C3] E. Laude, T. Möllenhoff, M. Moeller, J. Lellmann and D. Cremers, 
Sublabel-Accurate Convex Relaxation of Vectorial Multilabel Energies, 
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[C4] N. Nagaraja, F. R. Schmidt and T. Brox, 
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[C5] M. R. Oswald and D. Cremers, 
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2014.

[C6] C. Nieuwenhuis, S. Hawe, M. Kleinstein and D. Cremers, 
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[C7] M. R. Oswald, J. Stühmer and D. Cremers, 
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[C8] E. Strekalovskiy and D. Cremers, 
Real-Time Minimization of the Piecewise Smooth Mumford-Shah Functional, 
[C9] E. Toeppe, C. Nieuwenhuis and D. Cremers, 
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*A Co-occurrence Prior for Continuous Multi-Label Optimization*, 
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*Scale-Aware Object Tracking with Convex Shape Constraints on RGB-D Images*, 
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[C14] J. Lellmann, E. Strekalovskiy, S. Koetter and D. Cremers, 
*Total Variation Regularization for Functions with Values in a Manifold*, 
Sydney, Australia, December 2013.

[C15] C. Nieuwenhuis, E. Strekalovskiy and D. Cremers, 
*Proportion Priors for Image Sequence Segmentation*, 
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*Tree Shape Priors with Connectivity Constraints using Convex Relaxation on General Graphs*, 
Sydney, Australia, December 2013, Oral Presentation.

[C17] M. R. Oswald and D. Cremers, 
*A Convex Relaxation Approach to Space Time Multi-view 3D Reconstruction*, 
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[C19] M. R. Oswald, E. Toeppe and D. Cremers, 
*Fast and Globally Optimal Single View Reconstruction of Curved Objects*, 
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[C20] E. Strekalovskiy, A. Chambolle and D. Cremers, 
*A Convex Representation for the Vectorial Mumford-Shah Functional*, 
Providence, Rhode Island, June 2012.

[C21] N. Ufer, M. Souiai and D. Cremers, 
*Wehrli 2.0: An Algorithm for Tidying up Art*, 
Keywords: Convex-relaxation

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[C24] E. Strekalovskiy, B. Goldluecke and D. Cremers,
Tight Convex Relaxations for Vector-Valued Labeling Problems,
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[C26] C. Nieuwenhuis, E. Toeppe and D. Cremers,
Space-Varying Color Distributions for Interactive Multiregion Segmentation: Discrete versus Continuous Approaches,
177-190, 2011.

[C27] M. Klodt and D. Cremers,
A Convex Framework for Image Segmentation with Moment Constraints,
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[C28] E. Toeppe, M. R. Oswald, D. Cremers and C. Rother,
Silhouette-Based Variational Methods for Single View Reconstruction,

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A Convex Relaxation Approach for Computing Minimal Partitions,

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An Algorithm for Minimizing the Piecewise Smooth Mumford-Shah Functional,
Kyoto, Japan, 2009.
Keywords: Convex-relaxation

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[C34] T. Pock, T. Schoenemann, G. Graber, H. Bischof and D. Cremers,
A Convex Formulation of Continuous Multi-Label Problems,
Marseille, France, October 2008.

[C35] M. Klodt, T. Schoenemann, K. Kolev, M. Schikora and D. Cremers,
An Experimental Comparison of Discrete and Continuous Shape Optimization Methods,
European Conference on Computer Vision (ECCV), Marseille, France, October 2008.

[C36] D. Cremers, F. R. Schmidt and F. Barthel,
Shape Priors in Variational Image Segmentation: Convexity, Lipschitz Continuity and Globally Optimal Solutions,
Anchorage, Alaska, June 2008.

[C37] K. Kolev, M. Klodt, T. Brox and D. Cremers,
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Convexity in Image-Based 3D Surface Reconstruction,
Department of Computer Science, Technical University Munich, Germany, January 2012.

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[R1] M. Souiai, E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,
Label Configuration Priors for Continuous Multi-Label Optimization,

[R2] A. Chambolle, D. Cremers and T. Pock,
A Convex Approach for Computing Minimal Partitions,