Journal Articles

[J1] B. Goldluecke, M. Aubry, K. Kolev and D. Cremers,

[J2] E. Strekalovskiy, A. Chambolle and D. Cremers,

[J3] C. Nieuwenhuis and D. Cremers,

[J4] C. Nieuwenhuis, E. Toeppe and D. Cremers,

[J5] B. Goldluecke, E. Strekalovskiy and D. Cremers,

[J6] A. Chambolle, D. Cremers and T. Pock,

[J7] D. Cremers,

[J8] B. Goldluecke, E. Strekalovskiy and D. Cremers,

[J9] K. Kolev, T. Brox and D. Cremers,

[J10] D. Cremers and E. Strekalovskiy,
Total Cyclic Variation and Generalizations, 47(3): 258-277, November 2012.

[J11] D. Cremers and K. Kolev,

[J12] T. Pock, D. Cremers, H. Bischof and A. Chambolle,
Keywords: Convex-relaxation  

List of Publications

[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,
Binary partitioning, perceptual grouping, and restoration with semidefinite programming,

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,
2016, Oral Presentation, Received the Best Paper Honorable Mention Award at CVPR 2016.

[C3] E. Laude, T. Möllenhoff, M. Moeller, J. Lellmann and D. Cremers,
Sublabel-Accurate Convex Relaxation of Vectorial Multilabel Energies,
October 2016.

[C4] T. Windheuser and D. Cremers,
A Convex Solution to Spatially-Regularized Correspondence Problems,
October 2016.

[C5] N. Nagaraja, F. R. Schmidt and T. Brox,
Video Segmentation with Just a Few Strokes,
Santiago, Chile, Dec 2015.

[C6] M. R. Oswald and D. Cremers,
Surface Normal Integration for Convex Space-time Multi-view Reconstruction,
2014.

[C7] C. Nieuwenhuis, S. Hawe, M. Kleinsteuber and D. Cremers,
Co-Sparse Textural Similarity for Interactive Segmentation,
2014.

[C8] M. R. Oswald, J. Stühmer and D. Cremers,
Generalized Connectivity Constraints for Spatio-temporal 3D Reconstruction,
Keywords: Convex-relaxation

List of Publications

[C9] E. Strekalovskiy and D. Cremers, 

[C10] E. Toeppe, C. Nieuwenhuis and D. Cremers, 

[C11] M. Souiai, E. Strekalovskiy, C. Nieuwenhuis and D. Cremers, 

[C12] F. Stangl, M. Souiai and D. Cremers, 

[C13] T. Möllenhoff, C. Nieuwenhuis, E. Toeppe and D. Cremers, 

[C14] M. Klodt, J. Sturm and D. Cremers, 
Scale-Aware Object Tracking with Convex Shape Constraints on RGB-D Images, German Conference on Pattern Recognition (GCPR), Saarbrücken, Germany, September 2013.

[C15] J. Lellmann, E. Strekalovskiy, S. Koetter and D. Cremers, 
Total Variation Regularization for Functions with Values in a Manifold, Sydney, Australia, December 2013.

[C16] C. Nieuwenhuis, E. Strekalovskiy and D. Cremers, 
Proportion Priors for Image Sequence Segmentation, Sydney, Australia, December 2013.

[C17] J. Stühmer, P. Schröder and D. Cremers, 
Tree Shape Priors with Connectivity Constraints using Convex Relaxation on General Graphs, Sydney, Australia, December 2013, Oral Presentation.

[C18] M. R. Oswald and D. Cremers, 
A Convex Relaxation Approach to Space Time Multi-view 3D Reconstruction, ICCV Workshop on Dynamic Shape Capture and Analysis (4DMOD), 2013.

[C19] E. Strekalovskiy, C. Nieuwenhuis and D. Cremers, 

[C20] M. R. Oswald, E. Toeppe and D. Cremers, 
Fast and Globally Optimal Single View Reconstruction of Curved Objects, Providence, Rhode Island, 534-541, June 2012.

[C21] E. Strekalovskiy, A. Chambolle and D. Cremers, 
A Convex Representation for the Vectorial Mumford-Shah Functional, Providence, Rhode Island, June 2012.
Keywords: Convex-relaxation

List of Publications

[C22] N. Ufer, M. Souiai and D. Cremers,  
Wehrli 2.0: An Algorithm for Tidying up Art,  

[C23] E. Strekalovskiy and D. Cremers,  
Total Variation for Cyclic Structures: Convex Relaxation and Efficient Minimization,  

[C24] B. Goldluecke and D. Cremers,  
Introducing Total Curvature for Image Processing,  
2011.

[C25] E. Strekalovskiy, B. Goldluecke and D. Cremers,  
Tight Convex Relaxations for Vector-Valued Labeling Problems,  
2011.

[C26] E. Strekalovskiy and D. Cremers,  
Generalized Ordering Constraints for Multilabel Optimization,  
2011.

[C27] C. Nieuwenhuis, E. Toeppe and D. Cremers,  
Space-Varying Color Distributions for Interactive Multiregion Segmentation: Discrete versus Continuous Approaches,  
177-190, 2011.

[C28] M. Klodt and D. Cremers,  
A Convex Framework for Image Segmentation with Moment Constraints,  
2011.

[C29] E. Toeppe, M. R. Oswald, D. Cremers and C. Rother,  
Silhouette-Based Variational Methods for Single View Reconstruction,  

[C30] E. Toeppe, M. R. Oswald, D. Cremers and C. Rother,  
Image-based 3D Modeling via Cheeger Sets,  
Queenstown, New Zealand, 53-64, November 2010, Received Honorable Mention Award.

[C31] K. Kolev, T. Pock and D. Cremers,  
Anisotropic Minimal Surfaces Integrating Photoconsistency and Normal Information for Multiview Stereo,  
Heraklion, Greece, September 2010.

[C32] B. Goldluecke and D. Cremers,  
Convex Relaxation for Multilabel Problems with Product Label Spaces,  
2010.

[C33] M. R. Oswald, E. Toeppe, K. Kolev and D. Cremers,  
Non-Parametric Single View Reconstruction of Curved Objects using Convex Optimization,  
Jena, Germany, 171-180, September 2009, Received a DAGM Paper Award.
Keywords: Convex-relaxation

List of Publications

[C34] T. Pock, A. Chambolle, H. Bischof and D. Cremers,
\textit{A Convex Relaxation Approach for Computing Minimal Partitions},

[C35] K. Kolev and D. Cremers,
\textit{Continuous Ratio Optimization via Convex Relaxation with Applications to Multiview 3D Reconstruction},

[C36] T. Pock, D. Cremers, H. Bischof and A. Chambolle,
\textit{An Algorithm for Minimizing the Piecewise Smooth Mumford-Shah Functional},
Kyoto, Japan, 2009.

[C37] T. Pock, T. Schoenemann, G. Graber, H. Bischof and D. Cremers,
\textit{A Convex Formulation of Continuous Multi-Label Problems},
Marseille, France, October 2008.

[C38] W. Trobin, T. Pock, D. Cremers and H. Bischof,
\textit{Continuous Energy Minimization via Repeated Binary Fusion},
Marseille, France, October 2008.

[C39] K. Kolev and D. Cremers,
\textit{Integration of Multiview Stereo and Silhouettes via Convex Functionals on Convex Domains},
Marseille, France, October 2008.

[C40] M. Klodt, T. Schoenemann, K. Kolev, M. Schikora and D. Cremers,
\textit{An Experimental Comparison of Discrete and Continuous Shape Optimization Methods},

[C41] D. Cremers, F. R. Schmidt and F. Barthel,
\textit{Shape Priors in Variational Image Segmentation: Convexity, Lipschitz Continuity and Globally Optimal Solutions},
Anchorage, Alaska, June 2008.

[C42] K. Kolev, M. Klodt, T. Brox and D. Cremers,
\textit{Propagated Photoconsistency and Convexity in Variational Multiview 3D Reconstruction},

[C43] K. Kolev, M. Klodt, T. Brox, S. Esedoglu and D. Cremers,
\textit{Continuous Global Optimization in Multiview 3D Reconstruction},

[C44] J. Keuchel, C. Schnoerr, C. Schellewald and D. Cremers,
\textit{Unsupervised Image Partitioning with Semidefinite Programming},

[C45] J. Keuchel, C. Schellewald, D. Cremers and C. Schnoerr,
\textit{Convex Relaxations for Binary Image Partitioning and Perceptual Grouping},

5
Keywords: Convex-relaxation

List of Publications

PhDThesis

[PhD1] K. Kolev, 
**Convexity in Image-Based 3D Surface Reconstruction,** 
Department of Computer Science, Technical University Munich, Germany, January 2012.

Technical Reports

[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,** 