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Aachen, Germany, 2015, Received the Best Paper Award.

[C85] C. Kerl, J. Stueckler and D. Cremers,
Dense Continuous-Time Tracking and Mapping with Rolling Shutter RGB-D Cameras,
Santiago, Chile, 2015.

[C86] M. Souiai, M. R. Oswald, Y. Kee, J. Kim, M. Pollefeys and D. Cremers,
Entropy Minimization for Convex Relaxation Approaches,
Santiago, Chile, 2015.

[C87] F. Stark, C. Hazirbas, R. Triebel and D. Cremers,
CAPTCHA Recognition with Active Deep Learning,
*GCPR Workshop on New Challenges in Neural Computation*, Aachen, Germany, 2015.

Model-Based Tracking at 300Hz using Raw Time-of-Flight Observations,
Santiago, Chile, 2015.

Direct Reconstruction of the Average Diffusion Propagator with Simultaneous Compressed-Sensing-Accelerated Diffusion Spectrum Imaging and Image Denoising by Means of Total Generalized Variation Regularization,
2014.

[C90] V. Golkov, M.I. Menzel, T. Sprenger, A. Haase, D. Cremers and J.I. Sperl,
Semi-Joint Reconstruction for Diffusion MRI Denoising Imposing Similarity of Edges in Similar Diffusion-Weighted Images,
2014.

Improved Diffusion Kurtosis Imaging and Direct Propagator Estimation Using 6-D Compressed Sensing,
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[C92] F. Steinbruecker, J. Sturm and D. Cremers,
Volumetric 3D Mapping in Real-Time on a CPU,
Hongkong, China, 2014.

[C93] E. Rodola, S. Rota Bulo, T. Windheuser, M. Vestner and D. Cremers,
Dense Non-Rigid Shape Correspondence Using Random Forests,
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[C94] Y. Kee, M. Souiai, D. Cremers and J. Kim,
Sequential Convex Relaxation for Mutual-Information-Based Unsupervised Figure-Ground Segmentation,
2014.

[C95] H. Alvarez, L.M. Paz, J. Sturm and D. Cremers,
Collision Avoidance for Quadrotors with a Monocular Camera,

[C96] J. Engel, T. Schöps and D. Cremers,
LSD-SLAM: Large-Scale Direct Monocular SLAM,
September 2014, Oral Presentation.

[C97] T. Schöps, J. Engel and D. Cremers,
Semi-Dense Visual Odometry for AR on a Smartphone,
September 2014, Best Short Paper Award.

[C98] T. Windheuser, M. Vestner, E. Rodola, R. Triebel and D. Cremers,
Optimal Intrinsic Descriptors for Non-Rigid Shape Analysis,
2014.

[C99] M. Strobel, J. Diebold and D. Cremers,
Flow and Color Inpainting for Video Completion,
German Conference on Pattern Recognition (GCPR), Münster, Germany, September 2014, Oral Presentation.

[C100] R. Maier, J. Sturm and D. Cremers,
Submap-based Bundle Adjustment for 3D Reconstruction from RGB-D Data,
German Conference on Pattern Recognition (GCPR), Münster, Germany, September 2014.

[C101] T. Gurdan, M. R. Oswald, D. Gurdan and D. Cremers,
Spatial and Temporal Interpolation of Multi-View Image Sequences,
Münster, Germany, Vol. 36, September 2014.

[C102] M. R. Oswald and D. Cremers,
Surface Normal Integration for Convex Space-time Multi-view Reconstruction, 2014.

[C103] C. Nieuwenhuis, S. Hawe, M. Kleinsteuber and D. Cremers,
Co-Sparse Textural Similarity for Interactive Segmentation, 2014.

[C104] M. R. Oswald, J. Stühmer and D. Cremers,

[C105] E. Strekalovskiy and D. Cremers,

[C106] A. Kanezaki, E. Rodola, D. Cremers and T. Harada,
[Taiou tenshuugou ruijido gakushuu wo mochiita goutai-higoutai buttai kenshutsu],
[C107] M. Andreux, E. Rodola, M. Aubry and D. Cremers,
Anisotropic Laplace-Beltrami Operators for Shape Analysis,
Sixth Workshop on Non-Rigid Shape Analysis and Deformable Image Alignment (NOR-DIA), 2014.

[C108] O. Dunkley, J. Engel, J. Sturm and D. Cremers,
Visual-Inertial Navigation for a Camera-Equipped 25g Nano-Quadrotor,

[C109] R. Triebel, J. Stühmer, M. Souiai and D. Cremers,
Active Online Learning for Interactive Segmentation Using Sparse Gaussian Processes,
German Conference on Pattern Recognition, 2014.

[C110] S. Debnath, S. S. Baishya, R. Triebel, V. Dutt and D. Cremers,
Environment-adaptive Learning: How Clustering Helps to Obtain Good Training Data,

[C111] A. Kanezaki, E. Rodola, D. Cremers and T. Harada,
Learning Similarities for Rigid and Non-Rigid Object Detection,
International Conference on 3D Vision (3DV), 2014.

[C112] D. Bender, M. Schikora, J. Sturm and D. Cremers,
INS-Camera Calibration without Ground Control Points,
9th IEEE ISIF Workshop on Sensor Data Fusion: Trends, Solutions, Applications (SDF), 2014.

[C113] C. Kerl, M. Souiai, J. Sturm and D. Cremers,
Towards Illumination-invariant 3D Reconstruction using ToF RGB-D Cameras,
International Conference on 3D Vision (3DV), 2014.

[C114] F. R. Schmidt, T. Windheuser, U. Schlickewei and D. Cremers,
Dense Elastic 3D Shape Matching,

[C115] M. Souiai, C. Nieuwenhuis, E. Strekalovskiy and D. Cremers,
Convex Optimization for Scene Understanding,
ICCV Workshop on Graphical Models for Scene Understanding, 2013.

[C116] J. Bergbauer, C. Nieuwenhuis, M. Souiai and D. Cremers,
Proximity Priors for Variational Semantic Segmentation and Recognition,
ICCV Workshop on Graphical Models for Scene Understanding, 2013.

[C117] V. Golkov, T. Sprenger, A. Menini, M.I. Menzel, D. Cremers and J.I. Sperl,
Effects of Low-Rank Constraints, Line-Process Denoising, and q-Space Compressed Sensing on Diffusion MR Image Reconstruction and Kurtosis Tensor Estimation,
2013, Oral Presentation.
Author: D. Cremers

List of Publications

[C118] V. Golkov, T. Sprenger, M.I. Menzel, D. Cremers and J.I. Sperl,
Line-Process-Based Joint SENSE Reconstruction of Diffusion Images with Intensity Inhomogeneity Correction and Noise Non-Stationarity Correction, 2013, Certificate of Merit Award.

[C119] V. Golkov, M.I. Menzel, T. Sprenger, A. Menini, D. Cremers and J.I. Sperl,
Reconstruction, Regularization, and Quality in Diffusion MRI Using the Example of Accelerated Diffusion Spectrum Imaging, 16th Annual Meeting of the German Chapter of the ISMRM, 2013, Oral Presentation.

[C120] V. Golkov, M.I. Menzel, T. Sprenger, A. Menini, D. Cremers and J.I. Sperl,

Noise Reduction in Accelerated Diffusion Spectrum Imaging through Integration of SENSE Reconstruction into Joint Reconstruction in Combination with q-Space Compressed Sensing, 2013.

[C122] C. Kerl, J. Sturm and D. Cremers,
Robust Odometry Estimation for RGB-D Cameras, May 2013, Best Vision Paper Award - Finalist.

[C123] E. Toeppe, C. Nieuwenhuis and D. Cremers,

[C124] E. Bylow, J. Sturm, C. Kerl, F. Kahl and D. Cremers,
Real-Time Camera Tracking and 3D Reconstruction Using Signed Distance Functions, Robotics: Science and Systems Conference (RSS), June 2013.

[C125] E. Bylow, J. Sturm, C. Kerl, F. Kahl and D. Cremers,
Direct Camera Pose Tracking and Mapping With Signed Distance Functions, Demo Track of the RGB-D Workshop on Advanced Reasoning with Depth Cameras at the Robotics: Science and Systems Conference (RSS), June 2013.

[C126] M. Souiai, E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,

[C127] F. Stangl, M. Souiai and D. Cremers,

[C128] T. Möllenhoff, C. Nieuwenhuis, E. Toeppe and D. Cremers,
[C129] C. Kerl, J. Sturm and D. Cremers,
Dense Visual SLAM for RGB-D Cameras,

[C130] T. Naseer, J. Sturm and D. Cremers,
FollowMe: Person Following and Gesture Recognition with a Quadrocopter,

[C131] 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.

[C132] J. Sturm, E. Bylow, F. Kahl and D. Cremers,
Dense Tracking and Mapping with a Quadrocopter,
Unmanned Aerial Vehicle in Geomatics (UAV-g), Rostock, Germany, September 2013.

[C133] D. Bender, M. Schikora, J. Sturm and D. Cremers,
Graph-based bundle adjustment for INS-camera calibration,
Unmanned Aerial Vehicle in Geomatics (UAV-g), Rostock, Germany, September 2013,
Best research paper award.

[C134] J. Sturm, E. Bylow, F. Kahl and D. Cremers,
CopyMe3D: Scanning and Printing Persons in 3D,
German Conference on Pattern Recognition (GCPR), Saarbrücken, Germany, September 2013.

[C135] E. Rodola, T. Harada, Y. Kuniyoshi and D. Cremers,
Efficient Shape Matching using Vector Extrapolation,
2013.

[C136] J. Engel, J. Sturm and D. Cremers,
Semi-Dense Visual Odometry for a Monocular Camera,
Sydney, Australia, December 2013.

[C137] E. Rodola, A. Torsello, T. Harada, Y. Kuniyoshi and D. Cremers,
Elastic Net Constraints for Shape Matching,
Sydney, Australia, December 2013.

[C138] J. Lellmann, E. Strekalovskiy, S. Koetter and D. Cremers,
Total Variation Regularization for Functions with Values in a Manifold,
Sydney, Australia, December 2013.

[C139] C. Nieuwenhuis, E. Strekalovskiy and D. Cremers,
Proportion Priors for Image Sequence Segmentation,
Sydney, Australia, December 2013.

[C140] 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.
List of Publications

[C141] G. Kuschk and D. Cremers,
Fast and Accurate Large-scale Stereo Reconstruction using Variational Methods,
ICCV Workshop on Big Data in 3D Computer Vision, Sydney, Australia, December 2013.

[C142] 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.

[C143] F. Steinbruecker, C. Kerl, J. Sturm and D. Cremers,
Large-Scale Multi-Resolution Surface Reconstruction from RGB-D Sequences,
Sydney, Australia, 2013.

[C144] T. Naseer, J. Sturm and D. Cremers,
Interactive Person Following and Gesture Recognition with a Flying Robot,
Proc. of the Assistance and Service Robotics Workshop (ASROB) at the IE-EE. Int. Conf. on Intelligent Robots and Systems (IROS), Nov. 2013.

[C145] D. Cremers, E. Rodola and T. Windheuser,
Relaxations for Minimizing Metric Distortion and Elastic Energies for 3D Shape Matching,

[C146] F. Endres, J. Hess, N. Engelhard, J. Sturm, D. Cremers and W. Burgard,
An Evaluation of the RGB-D SLAM System,

[C147] T. Ruehr, J. Sturm, D. Pangercic, M. Beetz and D. Cremers,
A Generalized Framework for Opening Doors and Drawers in Kitchen Environments,

[C148] M. Schikora, A. Gning, L. Mihaylova, D. Cremers, W. Koch and R. Streit,
Box-Particle Intensity Filter,

[C149] M. Schikora, A. Gning, L. Mihaylova, D. Cremers and W. Koch,
Box-Particle PHD Filter for Multi-Target Tracking,
15th International Conference on Information Fusion (FUSION), Singapore, July 2012.

[C150] L. Zhang, J. Sturm, D. Cremers and D. Lee,
Real-Time Human Motion Tracking using Multiple Depth Cameras,

[C151] E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,
Nonmetric Priors for Continuous Multilabel Optimization,
Firenze, Italy, Springer, October 2012.

[C152] T. Windheuser, H. Ishikawa and D. Cremers,
Generalized Roof Duality for Multi-Label Optimization: Optimal Lower Bounds and Persistency,
Firenze, Italy, October 2012.
[C153] T. Windheuser, H. Ishikawa and D. Cremers,
QPBO [QPBO arugorizumu no tachika ni yoru hiretsu mojura enerugi saisho-ka],
Meeting on Image Recognition and Understanding, Fukuoka, Japan, August 2012.

[C154] M. R. Oswald, E. Toeppe and D. Cremers,
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Providence, Rhode Island, 534-541, June 2012.

[C155] E. Strekalovskiy, A. Chambolle and D. Cremers,
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[C156] J. Engel, J. Sturm and D. Cremers,
Camera-Based Navigation of a Low-Cost Quadrocopter,

[C157] J. Sturm, N. Engelhard, F. Endres, W. Burgard and D. Cremers,
A Benchmark for the Evaluation of RGB-D SLAM Systems,

[C158] J. Engel, J. Sturm and D. Cremers,
Accurate Figure Flying with a Quadrocopter Using Onboard Visual and Inertial Sensing,

[C159] J. Sturm, W. Burgard and D. Cremers,
Evaluating Egomotion and Structure-from-Motion Approaches Using the TUM RGB-D Benchmark,

[C160] N. Ufer, M. Souiai and D. Cremers,
Wehrli 2.0: An Algorithm for Tidying up Art,

[C161] T. Windheuser, U. Schlickewei, F. R. Schmidt and D. Cremers,
Geometrically Consistent Elastic Matching of 3D Shapes: A Linear Programming Solution,
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[C162] M. Aubry, U. Schlickewei and D. Cremers,
Pose-Consistent 3D Shape Segmentation Based on a Quantum Mechanical Feature Descriptor,
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[C163] T. Schoenemann, S. Masnou and D. Cremers,
On a linear programming approach to the discrete Willmore boundary value problem and generalizations,
[C164] E. Strekalovskiy and D. Cremers,
Total Variation for Cyclic Structures: Convex Relaxation and Efficient Minimization,

[C165] B. Goldluecke and D. Cremers,
Introducing Total Curvature for Image Processing,
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[C166] E. Strekalovskiy, B. Goldluecke and D. Cremers,
Tight Convex Relaxations for Vector-Valued Labeling Problems,
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[C167] M. Aubry, K. Kolev, B. Goldluecke and D. Cremers,
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and R. Siegwart,
Towards a benchmark for RGB-D SLAM evaluation,

[C170] C. Nieuwenhuis, E. Toeppe and D. Cremers,
Space-Varying Color Distributions for Interactive Multiregion Segmentation: Discrete versus Continuous Approaches,
177-190, 2011.

[C171] M. Klodt and D. Cremers,
A Convex Framework for Image Segmentation with Moment Constraints,
2011.

[C172] M. Aubry, U. Schlickewei and D. Cremers,
The Wave Kernel Signature: A Quantum Mechanical Approach To Shape Analysis,
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[C173] F. Steinbruecker, J. Sturm and D. Cremers,
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Workshop on Live Dense Reconstruction with Moving Cameras at the Intl. Conf. on Computer Vision (ICCV), 2011.

[C174] M. Schikora, M.Oispuu, W. Koch and D. Cremers,
Multiple Source Localization Based on Biased Bearings Using the Intensity Filter - Approach and Experimental Results,
[C175] S. Madhogaria, M. Schikora, W. Koch and D. Cremers,
Pixel-based Classification Method for Detecting Unhealthy Regions in Leaf Images,
6th IEEE ISIF Workshop on Sensor Data Fusion: Trends, Solutions, Applications (SDF),
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[C177] M. Schikora, W. Koch and D. Cremers,
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D. Cremers, M. A. Magnor, M. R. Oswald and L. Zelnik-Manor(Eds.), Proceedings of
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bidopsis Plants,
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Leipzig, Germany, September 2010.

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Passive Multi-Object Localization and Tracking Using Bearing Data,
13th International Conference on Information Fusion (FUSION), Edinburgh, UK, July
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[C182] M. Schikora, D. Bender, W. Koch and D. Cremers,
Multi-target multi-sensor localization and tracking using passive antenna and
optical sensors on UAVs,

[C183] 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.

[C184] J. Stühmer, S. Gumhold and D. Cremers,
Real-Time Dense Geometry from a Handheld Camera,
Darmstadt, Germany, 11-20, September 2010.
[C185] J. Stühmer, S. Gumhold and D. Cremers, 
Parallel Generalized Thresholding Scheme for Live Dense Geometry from a 
Handheld Camera, 
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An Approach to Vectorial Total Variation based on Geometric Measure Theo-
ry, 
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[C187] B. Goldluecke and D. Cremers, 
Convex Relaxation for Multilabel Problems with Product Label Spaces, 
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[C188] 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.

[C189] F. R. Schmidt and D. Cremers, 
A Closed-Form Solution for Image Sequence Segmentation with Dynamical 
Shape Priors, 
Jena, Germany, September 2009.

[C190] F. R. Schmidt, E. Toeppe and D. Cremers, 
Efficient Planar Graph Cuts with Applications in Computer Vision, 
Miami, Florida, 351-356, June 2009, Received a CVPR Doctoral Spotlight Award.

[C191] T. Pock, A. Chambolle, H. Bischof and D. Cremers, 
A Convex Relaxation Approach for Computing Minimal Partitions, 

[C192] A. Wedel, C. Rabe, A. Meissner, U. Franke and D. Cremers, 
Detection and Segmentation of Independently Moving Objects from Dense 
Scene Flow, 

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A Linear Programming Relaxation, 
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and Boundary Estimation with Imprecise User Input, 
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[C200] F. Steinbruecker, T. Pock and D. Cremers, 
Large Displacement Optical Flow Computation without Warping, 
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[C201] D. Mitzel, T. Pock, T. Schoenemann and D. Cremers, 
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Jena, Germany, 2009.

[C202] F. Steinbruecker, T. Pock and D. Cremers, 
Advanced Data Terms for Variational Optic Flow Estimation, 
Braunschweig, Germany, 2009.

[C203] T. Schoenemann, F. R. Schmidt and D. Cremers, 
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Spaces, 

[C204] T. Pock, T. Schoenemann, G. Graber, H. Bischof and D. Cremers, 
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[C207] M. Klodt, T. Schoenemann, K. Kolev, M. Schikora and D. Cremers, 
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An Improved Algorithm for TV-L1 Optical Flow, 

[C209] W. Trobin, T. Pock, D. Cremers and H. Bischof, 
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[C215] O. Kleinschmidt, T. Brox and D. Cremers,  
Nonlocal texture filtering with efficient tree structures and invariant patch similarity measures,  
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[C223] A. Wedel, T. Schoenemann, T. Brox and D. Cremers,
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[C224] B. Rosenhahn, T. Brox, D. Cremers and H.-P. Seidel,
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[C231] T. Schoenemann and D. Cremers,
Near Real-time Motion Segmentation using Graph Cuts,

[C232] T. Brox, B. Rosenhahn, U. Kersting and D. Cremers,
Nonparametric density estimation for human pose tracking,

[C233] A. Wedel, U. Franke, J. Klappstein, T. Brox and D. Cremers,
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