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*International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2018.

[C18] V. Golkov, A. Vasilev, F. Pasa, I. Lipp, W. Boubaker, E. Sgarlata, F. Pfeiffer, V. Tomassini, D. K. Jones and D. Cremers,
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[C21] P. Haeusser, J. Plapp, V. Golkov, E. Aljalbout and D. Cremers,
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Conference on Robot Learning (CoRL), 2018.

[C35] Haefner, B., Queau, Y., Möllenhoff, T., Cremers and D.,
Fight ill-posedness with ill-posedness: Single-shot variational depth super-resolution from shading,

[C36] I. Grixa, P. Schulz, W. Stürzl and R. Triebel,
Appearance-Based Along-Route Localization for Planetary Missions,

[C37] M. Sundermeyer, Z. Marton, M. Durner, M. Brucker and R. Triebel,
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[C38] M. Denninger and R. Triebel,
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[C39] M. Jaimez, C. Kerl, J. Gonzalez-Jimenez and D. Cremers,
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[C41] L. Ma, J. Stueckler, C. Kerl and D. Cremers,
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[C42] Vestner, M., Litman, R., Rodola, E., Bronstein, A., Cremers and D.,
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[C44] L. von Stumberg, V. Usenko, J. Engel, J. Stueckler and D. Cremers,
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All: 1

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Establishment of an interdisciplinary workflow of machine learning-based Radiomics in sarcoma patients,

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[C53] K. Kurach, S. Gelly, M. Jastrzebski, P. Haeusser, O. Teytaud, D. Vincent and O. Bousquet,
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[C56] V. Golyanik, K. Kim, R. Maier, M. Niessner, D. Stricker and J. Kautz,
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[C57] T. Möllenhoff and D. Cremers, 
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[C58] Christian Nissler, Zoltan-Csaba Marton, Hannes Kisner, Ulrike Thomas and Rudolph Triebel, 
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[C62] F. Bernard, F. R. Schmidt, J. Thunberg and D. Cremers, 
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Keyframe-Based Visual-Inertial Online SLAM with Relocalization, 

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[C65] Peng, S., Haefner, B., Queau, Y., Cremers and D., 
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A Large Dataset to Train Convolutional Networks for Disparity, Optical Flow, and Scene Flow Estimation, 
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[C70] A. Narr, R. Triebel and D. Cremers,
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[C71] Z. Lähner, E. Rodola, M. M. Bronstein, D. Cremers, O. Burghard, L. Cosmo, A. Dieck-
mann, R. Klein and Y. Sahillioglu,
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Figure-Ground Segmentation,
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[C122] T. Schöps, J. Engel and D. Cremers,
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[C147] Bergbauer, Julia, Tari and Sibel,
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tensity Inhomogeneity Correction and Noise Non-Stationarity Correction,
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[C166] E. Bylow, J. Sturm, C. Kerl, F. Kahl and D. Cremers,
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Large-Scale Multi-Resolution Surface Reconstruction from RGB-D Sequences,
Sydney, Australia, 2013.

[C187] 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 IEEE Int. Conf. on Intelligent Robots and Systems (IROS)*, Nov. 2013.
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[C188] R. Triebel, H. Grimmett, R. Paul and I. Posner,
Driven Learning for Driving: How Introspection Improves Semantic Mapping,
The International Symposium on Robotics Research (ISRR), 2013.

[C189] D. Cremers, E. Rodola and T. Windheuser,
Relaxations for Minimizing Metric Distortion and Elastic Energies for 3D Shape Matching,

[C190] M. Schadler, J. Stueckler and S. Behnke,
Multi-resolution surfel mapping and real-time pose tracking using a continuously rotating 2D laser scanner,

[C191] J. Stueckler and S. Behnke,
Efficient Dense 3D Rigid-Body Motion Segmentation in RGB-D Video,

[C192] M. McElhone, J. Stueckler and S. Behnke,
Joint detection and pose tracking of multi-resolution surfel models in RGB-D,

[C193] T. Fiolka, J. Stueckler, D. A. Klein, D. Schulz and S. Behnke,
Distinctive 3D surface entropy features for place recognition.,

[C194] A. Berner, Jun Li, D. Holz, J. Stueckler, S. Behnke and R. Klein,
Combining contour and shape primitives for object detection and pose estimation of prefabricated parts,

[C195] J. Stueckler and S. Behnke,
Hierarchical Object Discovery and Dense Modelling From Motion Cues in RGB-D Video,

[C196] M. Nieuwenhuisen, D. Droeschel, D. Holz, J. Stueckler, A. Berner, Jun Li, R. Klein and S. Behnke,
Mobile bin picking with an anthropomorphic service robot,

[C197] L. Gorelick, F. R. Schmidt and Y. Boykov,
Fast Trust Region for Segmentation,
Portland, Oregon, Jun 2013.

[C198] L. Ma, T. Whelan, E. Bondarev, P. H. N. de With and J. McDonald,
Planar simplification and texturing of dense point cloud maps,
[C199] E. Rodola, A.M. Bronstein, A. Albarelli, F. Bergamasco and A. Torsello, 
A game-theoretic approach to deformable shape matching, 

[C200] F. Endres, J. Hess, N. Engelhard, J. Sturm, D. Cremers and W. Burgard, 
An Evaluation of the RGB-D SLAM System, 

[C201] T. Ruehr, J. Sturm, D. Pangercic, M. Beetz and D. Cremers, 
A Generalized Framework for Opening Doors and Drawers in Kitchen Environments, 

[C202] Dominik Joho AND Gian Diego Tipaldi AND Nikolas Engelhard AND Cyrill Stachniss AND Wolfram Burgard, 
Nonparametric Bayesian Models for Unsupervised Scene Analysis and Reconstruction, 

[C203] M. Schikora, A. Gning, L. Mihaylova, D. Cremers, W. Koch and R. Streit, 
Box-Particle Intensity Filter, 

[C204] M. Schikora, A. Gning, L. Mihaylova, D. Cremers and W. Koch, 
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15th International Conference on Information Fusion (FUSION), Singapore, July 2012.

[C205] L. Zhang, J. Sturm, D. Cremers and D. Lee, 
Real-Time Human Motion Tracking using Multiple Depth Cameras, 

[C206] E. Strekalovskiy, C. Nieuwenhuis and D. Cremers, 
Nonmetric Priors for Continuous Multilabel Optimization, 
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[C207] T. Windheuser, H. Ishikawa and D. Cremers, 
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[C208] T. Windheuser, H. Ishikawa and D. Cremers, 
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[C209] 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.

[C210] E. Strekalovskiy, A. Chambolle and D. Cremers, 
A Convex Representation for the Vectorial Mumford-Shah Functional, 
Providence, Rhode Island, June 2012.
[C211] J. Engel, J. Sturm and D. Cremers,
Camera-Based Navigation of a Low-Cost Quadrocopter,

[C212] J. Sturm, N. Engelhard, F. Endres, W. Burgard and D. Cremers,
A Benchmark for the Evaluation of RGB-D SLAM Systems,

[C213] J. Engel, J. Sturm and D. Cremers,
Accurate Figure Flying with a Quadrocopter Using Onboard Visual and Inertial Sensing,

[C214] J. Sturm, W. Burgard and D. Cremers,
Evaluating Egomotion and Structure-from-Motion Approaches Using the TUM RGB-D Benchmark,

Evaluation of DSI Imaging with Compressed Sensing under the Presence of Different Noise Levels on a Diffusion Phantom, 2012.


[C217] N. Ufer, M. Souiai and D. Cremers,
Wehrli 2.0: An Algorithm for Tidying up Art,

Semantic Categorization of Outdoor Scenes with Uncertainty Estimates using Multi-Class Gaussian Process Classification,

Parsing Outdoor Scenes from Streamed 3D Laser Data Using Online Clustering and Incremental Belief Updates,

[C220] U. Hubert, J. Stueckler and S. Behnke,
Bayesian calibration of the hand-eye kinematics of an anthropomorphic robot,
Proc. of the 12th IEEE-RAS Int. Conf. on Humanoid Robots (Humanoids), 618-624, November 2012.
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Semantic mapping using object-class segmentation of RGB-D images,
Proc. of the IEEE/RSJ Int. Conf. on Intelligent Robots and Systems (IROS), 3005-3010, October 2012.

[C222] J. Stueckler and S. Behnke,
Integrating depth and color cues for dense multi-resolution scene mapping using RGB-D cameras,
Proc. of the IEEE Int. Conf. on Multisensor Fusion and Integration for Intelligent Systems (MFI), 162-167, September 2012.

[C223] S. Muszynski, J. Stueckler and S. Behnke,
Adjustable autonomy for mobile teleoperation of personal service robots,
Proc. of the IEEE Int. Symp. on Robot and Human Interactive Communication, 933-940, September 2012.

[C224] T. Fiolka, J. Stueckler, D. A. Klein, D. Schulz and S. Behnke,
SURE: Surface Entropy for Distinctive 3D Features,

[C225] G. M. Garcia, D. A. Klein, J. Stueckler, S. Frintrop and A. B. Cremers,
Adaptive Multi-cue 3D Tracking of Arbitrary Objects,

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[C227] M. Nieuwenhuisen, J. Stueckler, A. Berner, R. Klein and S. Behnke,
Shape-Primitive Based Object Recognition and Grasping,

[C228] J. Kläss, J. Stueckler and S. Behnke,
Efficient Mobile Robot Navigation using 3D Surfel Grid Maps,

[C229] J. Stueckler and S. Behnke,
Robust Real-Time Registration of RGB-D Images using Multi-Resolution Surfel Representations,

[C230] V. Usenko, F. Seidel, Z. Marton, D. Pangeric and M. Beetz,
Furniture Classification using WWW CAD Models,

[C231] F. R. Schmidt and Y. Boykov,
Hausdorff Distance Constraint for Multi-Surface Segmentation,

[C232] L. Gorelick, F. R. Schmidt, Y. Boykov, A. Delong and A. Ward,
Segmentation with non-linear regional constraints via line-search cuts,
A. Torsello, E. Rodola and A. Albarelli,
Multiview Registration via Graph Diffusion of Dual Quaternions,
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113-120, 2011.

A. Albarelli, E. Rodola and A. Torsello,
A Non-Cooperative Game for 3D Object Recognition in Cluttered Scenes,
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A. Torsello, E. Rodola and A. Albarelli,
Sampling Relevant Points for Surface Registration,
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Geometrically Consistent Elastic Matching of 3D Shapes: A Linear Programming Solution,
2011.

M. Aubry, U. Schlickewei and D. Cremers,
Pose-Consistent 3D Shape Segmentation Based on a Quantum Mechanical Feature Descriptor,
Frankfurt, Germany, Springer, 2011.

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On a linear programming approach to the discrete Willmore boundary value problem and generalizations,

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

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[C246] N. Engelhard, F. Endres, J. Hess, J. Sturm and W. Burgard,
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Towards a benchmark for RGB-D SLAM evaluation,

[C248] C. Nieuwenhuis, E. Toeppe and D. Cremers,
Space-Varying Color Distributions for Interactive Multiregion Segmentation: Discrete versus Continuous Approaches,
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[C249] M. Klodt and D. Cremers,
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2011.

[C250] M. Aubry, U. Schlickewei and D. Cremers,
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[C251] F. Steinbruecker, J. Sturm and D. Cremers,
Real-Time Visual Odometry from Dense RGB-D Images,
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[C253] M. Schikora, M.Oispuu, W. Koch and D. Cremers,
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[C254] S. Madhogaria, M. Schikora, W. Koch and D. Cremers,
Pixel-based Classification Method for Detecting Unhealthy Regions in Leaf Images,
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[C255] M. Schikora, W. Koch, R.L. Streit and D. Cremers,
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[C256] M. Oispuu and M. Schikora,
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[C257] M. Schikora, W. Koch and D. Cremers,
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International Conference on Acoustics, Speech and Signal Processing (ICASSP), Prag, Czech Republic, Mai 2011.

[C258] E. Toeppe, M. R. Oswald, D. Cremers and C. Rother,
Silhouette-Based Variational Methods for Single View Reconstruction,

[C259] M. R. Oswald, E. Toeppe, C. Nieuwenhuis and D. Cremers,
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[C260] J. Shin, R. Triebel and R. Siegwart,
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[C261] J. Maye, R. Triebel, L. Spinello and R. Siegwart,
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[C262] B. Oehler, J. Stueckler, J. Welle, D. Schulz and S. Behnke,
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[C263] J. Stueckler and S. Behnke,
Following human guidance to cooperatively carry a large object,
Proc. of the 11th IEEE-RAS Int. Conf. on Humanoid Robots (Humanoids), 218-223, October 2011.

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Proc. of the European Conf. on Mobile Robots (ECMR), 177-182, 2011.

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Compliant Task-Space Control with Back-Drivable Servo Actuators,
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gesture recognition using Time-of-Flight cameras,
*Proc. of the IEEE Int. Conf. on Robotics and Automation (ICRA)*, 1205-1210, May 2011.

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[C268] D. Droeschel, J. Stueckler and S. Behnke,
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[C269] F. R. Schmidt, H. Ackermann and B. Rosenhahn,
*Multilinear Model Estimation with L2-Regularization*,

[C270] A. Delong, L. Gorelick, F. R. Schmidt, O. Veksler and Y. Boykov,
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[C271] A. Albarelli, E. Rodola and A. Torsello,
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[C272] E. Rodola, A. Albarelli and A. Torsello,
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*20th International Conference on Pattern Recognition (ICPR)*, 57-60, 2010.

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proach,

[C274] E. Rodola, A. Albarelli and A. Torsello,
A Game-Theoretic Approach to the Enforcement of Global Consistency in
Multi-View Feature Matching,
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[C275] A. Albarelli, E. Rodola and A. Torsello,
A Game-Theoretic Approach to Fine Surface Registration without Initial Mo-
tion Estimation,

[C276] A. Albarelli, E. Rodola and A. Torsello,
Robust Game-Theoretic Inlier Selection for Bundle Adjustment,
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[C277] A. Albarelli, E. Rodola and A. Torsello,
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bidopsis Plants,
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optical sensors on UAVs,

[C281] E. Toeppe, M. R. Oswald, D. Cremers and C. Rother,
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Queenstown, New Zealand, 53-64, November 2010, Received Honorable Mention
Award.

[C282] J. Stühmer, S. Gumhold and D. Cremers,
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[C287] C. Nieuwenhuis, B. Berkels and M. Rumpf,
Interactive Motion Segmentation,

[C288] J. Sturm, K. Konolige, C. Stachniss and W. Burgard,
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[C290] S. Chitta, M. Piccoli and J. Sturm,
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[C292] R. Kaestner, N. Engelhard, R. Triebel and R. Siegwart,
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[C294] R. Triebel, J. Shin and R. Siegwart,
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[C295] L. Spinello, K. O. Arras, R. Triebel and R. Siegwart,
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[C303] K. Gräve, J. Stueckler and S. Behnke,


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[C305] M. Nieuwenhuisen, J. Stueckler and S. Behnke,

**Improving indoor navigation of autonomous robots by an explicit representation of doors**, *Proc. of the IEEE Int. Conf. on Robotics and Automation (ICRA)*, 4895-4901, May 2010.

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[C308] A. Albarelli, E. Rodola, S. Rota Bulo and A. Torsello,


[C309] M. R. Oswald, E. Toeppe, K. Kolev and D. Cremers,

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[C310] F. R. Schmidt and D. Cremers,

**A Closed-Form Solution for Image Sequence Segmentation with Dynamical Shape Priors**, Jena, Germany, September 2009.
[C311] F. R. Schmidt, E. Toeppe and D. Cremers,  
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[C312] T. Pock, A. Chambolle, H. Bischof and D. Cremers,  
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**Reconstructing Optical Flow Fields by Motion Inpainting**,  
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*Image Segmentation with Elastic Shape Priors via Global Geodesics in Product Spaces*,

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*Efficient Dense Scene Flow from Sparse or Dense Stereo Data*,
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*An Unbiased Second-Order Prior for High-Accuracy Motion Estimation*,
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[C347] T. Schoenemann and D. Cremers,
*Matching Non-rigidly Deformable Shapes Across Images: A Globally Optimal Solution*,
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[C349] T. Schoenemann and D. Cremers, 
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[C350] B. Rosenhahn, T. Brox, D. Cremers and H.-P. Seidel, 
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[C351] O. Kleinschmidt, T. Brox and D. Cremers, 
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[C352] C. Nieuwenhuis, R. Mester and C. Garbe, 
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