2023
Conference and Workshop Papers
[C1] F. Hofherr, L. Koestler, F. Bernard and D. Cremers,
Neural Implicit Representations for Physical Parameter Inference from a Single Video,

2022
Conference and Workshop Papers
[C1] L. Koestler, D. Grittner, M. Moeller, D. Cremers and Z. Lähner,
Intrinsic Neural Fields: Learning Functions on Manifolds,
European Conference on Computer Vision (ECCV), 2022.

2021
Conference and Workshop Papers
[C1] T. Yenamandra, A. Tewari, F. Bernard, H.P. Seidel, M. Elgharib, D. Cremers and C. Theobalt,
i3DMM: Deep Implicit 3D Morphable Model of Human Heads,
Isometric Multi-Shape Matching,

2020
Journal Articles
[J1] C. Sommer, Y. Sun, L. J. Guibas, D. Cremers and T. Birdal,
From Planes to Corners: Multi-Purpose Primitive Detection in Unorganized 3D Point Clouds,

Conference and Workshop Papers
[C1] M. Eisenberger, Z. Lähner and D. Cremers,
Smooth Shells: Multi-Scale Shape Registration with Functional Maps,
IEEE International Conference on Computer Vision and Pattern Recognition (CVPR), 2020, Oral Presentation.
[C2] M. Eisenberger and D. Cremers,
Hamiltonian Dynamics for Real-World Shape Interpolation,
European Conference on Computer Vision (ECCV), 2020, Spotlight Presentation.
[C3] S. Weiss, R. Maier, D. Cremers, R. Westermann and N. Thuerey,
 Correspondence-Free Material Reconstruction using Sparse Surface Constraints,
Keywords: Geometry Processing

List of Publications

[C4] C. Sommer, Y. Sun, E. Bylow and D. Cremers,
PrimiTect: Fast Continuous Hough Voting for Primitive Detection,

[C5] B Holzschuh, Z Lähner and D Cremers,
Simulated Annealing for 3D Shape Correspondence,

[C6] M Aygün, Z Lähner and D Cremers,
Unsupervised Dense Shape Correspondence using Heat Kernels,

2019

Journal Articles

[J1] E Rodola, Z Lähner, AM. Bronstein, MM. Bronstein and J Solomon,
Functional Maps Representation on Product Manifolds,

Conference and Workshop Papers

Shape Correspondence with Isometric and Non-Isometric Deformations,
Silvia Biasotti, Guillaume Lavoué and Remco C. Veltkamp(Eds.), *12th Eurographics Workshop on 3D Object Retrieval, 3DOR@Eurographics 2019*, Genoa, Italy, May 5-6, 2019, Eurographics Association, 111-119, 2019.

[C2] M. Eisenberger, Z. Lähner and D. Cremers,
Divergence-Free Shape Correspondence by Deformation,

[C3] S. Weiss, R. Maier, R. Westermann, D. Cremers and N. Thuerey,
Sparse Surface Constraints for Combining Physics-based Elasticity Simulation and Correspondence-Free Object Reconstruction,

2018

Conference and Workshop Papers

[C1] C. Sommer and D. Cremers,
Joint Representation of Primitive and Non-primitive Objects for 3D Vision,

[C2] Z. Lähner, D. Cremers and T. Tung,
DeepWrinkles: Accurate and Realistic Clothing Modeling,

[C3] V. Estellers, F. Schmidt and D. Cremers,
Robust Fitting of Subdivision Surfaces for Smooth Shape Analysis,
*Proc. of the Int. Conference on 3D Vision (3DV)*, September 2018, Received the Best Paper Award at 3DV 2018.
2017
Journal Articles

[J1] E. Rodola, M. Möller and D. Cremers,
Regularized Pointwise Map Recovery from Functional Correspondence,

Conference and Workshop Papers

[C1] M. Vestner, R. Litman, E. Rodola, A. Bronstein and D. Cremers,
Product Manifold Filter: Non-Rigid Shape Correspondence via Kernel Density Estimation in the Product Space,

Efficient Deformable Shape Correspondence via Kernel Matching,

[C3] F. Bernard, F. R. Schmidt, J. Thunberg and D. Cremers,
A Combinatorial Solution to Non-Rigid 3D Shape-to-Image Matching,

2016
Book Chapters

[BC1] M. Vestner, E. Rodola, T. Windheuser, RBS. Bulo and D. Cremers,
Applying Random Forests to the Problem of Dense Non-rigid Shape Correspondence,

Conference and Workshop Papers

[C1] Z. Lähner, E. Rodola, F. R. Schmidt, M. M. Bronstein and D. Cremers,
Efficient Globally Optimal 2D-to-3D Deformable Shape Matching,
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, May 2016.

SHREC’16: Matching of Deformable Shapes with Topological Noise,
*Proc. of Eurographics Workshop on 3D Object Retrieval (3DOR)*, May 2016.

[C3] I. Chiotellis, R. Triebel, T. Windheuser and D. Cremers,
Non-Rigid 3D Shape Retrieval via Large Margin Nearest Neighbor Embedding,
*European Conference on Computer Vision (ECCV)*, October 2016.

[C4] T. Windheuser and D. Cremers,
A Convex Solution to Spatially-Regularized Correspondence Problems,
*European Conference on Computer Vision (ECCV)*, October 2016.
Keywords: Geometry Processing  List of Publications

2015
Journal Articles

[J1] A. Albarelli, E. Rodola and A. Torsello,
Fast and Accurate Surface Alignment through an Isometry-Enforcing Game,

2013
Journal Articles

[J1] E. Rodola, A. Albarelli, F. Bergamasco and A. Torsello,
A Scale Independent Selection Process for 3D Object Recognition in Cluttered Scenes,

[J2] A. Torsello, A. Albarelli and E. Rodola,
Stable and Fast Techniques for Unambiguous Compound Phase Coding,