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
Journal Articles

[J1] M Brahimi, B Haefner, T Yenamandra, B Goldluecke and D Cremers,
SupeRVol: Super-Resolution Shape and Reflectance Estimation in Inverse Volume Rendering,

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, HP Seidel, M Elgharib, D Cremers and C Theobalt,
i3DMM: Deep Implicit 3D Morphable Model of Human Heads,

[C2] M Gao, Z Lähner, J Thunberg, D Cremers and F Bernard,
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.
Keywords: Geometry Processing

List of Publications

[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,

[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,

[C2] Z. Lähner, D. Cremers and T. Tung,

[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,

Conference and Workshop Papers

[C1] M. Vestner, R. Litman, E. Rodola, A. Bronstein and D. Cremers,

**Efficient Deformable Shape Correspondence via Kernel Matching**, *International Conference on 3D Vision (3DV)*, Qingdao, China, October 2017, **Oral Presentation**.

[C3] F. Bernard, F. R. Schmidt, J. Thunberg and D. Cremers,

2016
Book Chapters

[BC1] M. Vestner, E. Rodola, T. Windheuser, RBS. Bulo and D. Cremers,

Conference and Workshop Papers

[C1] Z. Lähner, E. Rodola, F. R. Schmidt, M. M. Bronstein and D. Cremers,
**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.

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**,  