Author: Demmel

List of Publications

Journal Articles

[J1] V. Usenko, N. Demmel, D. Schubert, J. Stueckler and D. Cremers, 
Visual-Inertial Mapping with Non-Linear Factor Recovery, 

Conference and Workshop Papers

[C1] D Muhle, L Koestler, N Demmel, F Bernard and D Cremers, 
The Probabilistic Normal Epipolar Constraint for Frame-To-Frame Rotation Optimization under Uncertain Feature Positions, 
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

[C2] S Weber, N Demmel, T Chon Chan and D Cremers, 
Power Bundle Adjustment for Large-Scale 3D Reconstruction, 
submission, 2022.

[C3] N Demmel, C Sommer, D Cremers and V Usenko, 
Square Root Bundle Adjustment for Large-Scale Reconstruction, 

[C4] N Demmel, D Schubert, C Sommer, D Cremers and V Usenko, 
Square Root Marginalization for Sliding-Window Bundle Adjustment, 
IEEE International Conference on Computer Vision (ICCV), 2021.

[C5] MW Wudenka, MG Müller, N Demmel, A Wedler, R Triebel, D Cremers and W Stuerzl, 
Towards Robust Monocular Visual Odometry for Flying Robots on Planetary Missions, 

[C6] S Klenk, J Chui, N Demmel and D Cremers, 
TUM-VIE: The TUM Stereo Visual-Inertial Event Dataset, 

[C7] S Weber, N Demmel and D Cremers, 
Multidirectional Conjugate Gradients for Scalable Bundle Adjustment, 
German Conference on Pattern Recognition (GCPR), 2021, Oral Presentation.

[C8] C. Sommer, V. Usenko, D. Schubert, N. Demmel and D. Cremers, 
Efficient Derivative Computation for Cumulative B-Splines on Lie Groups, 

[C9] N Demmel, M Gao, E Laude, T Wu and D Cremers, 
Distributed Photometric Bundle Adjustment, 

[C10] D. Schubert, N. Demmel, L. von Stumberg, V. Usenko and D. Cremers, 
Rolling-Shutter Modelling for Visual-Inertial Odometry, 
*The TUM VI Benchmark for Evaluating Visual-Inertial Odometry*,

[C12] X. Gao, R. Wang, N. Demmel and D. Cremers,
*LDSO: Direct Sparse Odometry with Loop Closure*,

[C13] D. Schubert, N. Demmel, V. Usenko, J. Stueckler and D. Cremers,
*Direct Sparse Odometry With Rolling Shutter*,

[C14] V. Usenko, N. Demmel and D. Cremers,
*The Double Sphere Camera Model*,

[C15] J. Diebold, N. Demmel, C. Hazirbas, M. Möller and D. Cremers,
*Interactive Multi-label Segmentation of RGB-D Images*,
*Scale Space and Variational Methods in Computer Vision (SSVM)*, June 2015.

[C16] L. Mösenlechner, N. Demmel and M. Beetz,
*Becoming action-aware through reasoning about logged plan execution traces*,