# Hendrik Peter Asmus Lensch

Eberhard Karls Universität Tübingen
Wilhelm-Schickard-Institut, Computergrafik
Sand 14
72076 Tübingen
Germany

phone: +49 7071 29 76356
email: hendrik.lensch@uni-tuebingen.de

## RESEARCH INTERESTS

image-based and hardware accelerated rendering, computational photography, 3D acquisition, measurement of reflection properties, massively parallel programming

## EDUCATION

| | |
|---|---|
| 09/1993 – 08/1999 | Studies in Computer Science at Universität Erlangen-Nürnberg |
| 08/1996 – 07/1997 | Exchange student at the Royal Institute of Technology (KTH) Stockholm, Sweden |
| 08/1999 – 12/2003 | Ph.D. Student, MPI für Informatik, Saarbrücken Supervisor: Prof. Dr. H.-P. Seidel Degree: Dr.-Ing., grade: with distinction |
| 12/2003 – 04/2004 | Research Associate, MPI für Informatik, Saarbrücken |
| 05/2004 – 03/2006 | Visiting Assistant Professor, Stanford University, USA |
| 04/2006 – 12/2008 | Head of an independent research group, MPI für Informatik, Saarbrücken |
| 01/2009 – 09/2011 | Full professor, Institut für Medieninformatik, Universität Ulm |
| 10/2011 - today | Full professor, Chair for Computer Graphics, Universität Tübingen |

## EXPERIENCE

**Universität Tübingen, Chair for Computer Graphics, since October 2011 – September 2011**

Research in the area of image-based and hardware accelerated rendering, massively parallel programming, computational photography, 3D acquisition, global illumination.

**Universität Ulm, Institut für Medieninformatik, Deputy Director, January 2009 – September 2011**

Program co-chair of *IEEE International Conference on Computational Photography (ICCP) 2010*.

Program co-chair of *Eurographics Short Papers 2010*.

Program co-chair of *Eurographics Symposium on Rendering (EGSR) 2009*.

**MPI für Informatik, Head of an independent research group on General Appearance Acquisition and Computational Photography, April 2006 – December 2008**

Program co-chair and local organizer of
*Vision, Modeling and Visualization (VMV) 2007*.

**Stanford University, USA, Visiting Assistant Professor, May 2004 – March 2006**

Head of research group *General Appearance Acquisition* within the *Max Planck Center for Visual Computing and Communication*.

local organizer of *Vision, Modeling and Visualization 2004*.

**MPI für Informatik, Research Associate/Ph.D. student, August 1999 - April 2004**

Dissertation: *Efficient, Image-Based Appearance Acquisition of Real-World Objects*

## FELLOWSHIPS AND AWARDS

**EUROGRAPICS Young Researcher Award 2005**

”... in recognition of his outstanding contributions to Computer Graphics with a focus on Reflectance Measurement and Dual Photography”.

**Max Planck Center for Visual Computing and Communication 2004-2008**

**DFG Emmy-Noether-Programm 2007–2013**

**NVIDIA Professor Partnership Award 2010**

## GRANT PROPOSALS

Author of the proposal and coordinator of the project ViHAP3D – Virtual Heritage: High Quality 3D Acquisition and Presentation, funded by the European Union (EU IST 2001-032641, www.vihap3d.org).

Author of the proposal and coordinator of the sub project 3D Acquisition within the research initiative V3D2  Verteilte Verarbeitung und Vermittlung Digitaler Dokumente (DFG-SPP Nr. 1041), funded by the German Research Foundation (DFG).

## TEACHING

*Massively Parallel Computing* (yearly).

*Computer Graphics* (yearly).

*Advanced Image Synthesis* (yearly).

*Computational Photography* (yearly).

*Massively Parallel Computing with Cuda* (2008), co-taught with Dr. Robert Strzodka.

*Computer Graphics* (2008).

*Computer Graphics* (2007).

*Computational Photography* (2007).

*Computational Photography* (CS448), co-taught with Prof. Marc Levoy (2006).

*Appearance Modeling* (CS448), co-taught with Prof. Pat Hanrahan (2004).

*3D Image Analysis and Synthesis*, co-taught with Prof. Marcus Magnor (2003).

## SUPERVISING GRADUATE STUDENTS

### Dissertations – Supervised

Gaurav Garg: *Efficiently Acquiring Reflectance Fields Using Patterned Illumination*, Stanford University, co-supervision with Prof. Marc Levoy, Juni 2006.

Billy Chen: *Novel Methods for Manipulating and Combining Light Fields*, Stanford University, co-supervision with Prof. Marc Levoy, Juni 2006.

Andrei Lintu: *Realistic Rendering and Reconstruction of Astronomical Objects and an Augmented Reality Application for Astronomy*, December 2007.

Tongbo Chen: *New 3D Scanning Techniques for Complex Scenes*, December 2008.

Martin Fuchs: *Advanced Methods for Relightable Scene Representations in Image Space*, December 2008.

Christian Fuchs: *Captring and Reconstructing the Appearance of Complex 3D Scenes*, May 2009.

Matthias Hullin: *Reconsidering Light Transport*, December 2010.

Johannes Hanika: *Spectral Light Transport Simulation using a Precision-based Ray Tracing Architecture*, March 2011.

Holger Dammertz: *Acceleration Methods for Ray Tracing based Global Illumination*, April 2011.

### Dissertations – Secondary Reviewer

Christoffer Menk: *Photorealistic Visualization Techniques for Using Spatial Augmented Reality in the Design Process*, Universität Kiel, Februar 2012.

Ioan Cleju: *Texture Registration for 3D Models*, Universität Konstanz, Oktober 2008.

Jaakko Lehtinen: *Theory and Algorithms for Efficient Physically-Based Illumination*, Helsinki University of Technology, August 2007.

Karl vom Berge: *Compact Factored Representations for Reflectance*, Katholieke Universiteit Leuven, Mai 2007.

**Current Ph.D. students**

Boris Ajdin: *Computational Photography and Appearance Reproduction*.

Manuel Finckh: *Relighting from Unconstrained Image Sets*.

Katharina Schwarz: *Semantics and Images*.

Benjamin Resch: *Large Scale Photorealistic 3D Reocnstruction*.

Jian Wei: *3D Display Technology*.

**Master Students**

Florian Gawrilowicz: *RGB+IR Imaging*

Fabian Groh: *Multi-Kinect Acquisition*

Tobias Häußler: *Moblie SVBRDF Measurement Device*

Katja Körber: *Endless Textures on Mobile Platforms*

Christoph Schied: *Kinect Light Source*


Christian Bailer: *Scale Robust Multi View Stereo*, September 2011.

Benjamin Resch: *Online Structure from Motion Using Geo-referenced data*, August 2011.

Daniel Sewtz: *Edge Avoiding Wavelets in Image Processing*, January 2011.

Paul Evers: *Semantic Preserving Mesh Editing*, December 2010.

Christian Spika: *Automatic Previsualization from Motions Picture Scripts*, December 2010.

Markus Neumann (Bachelor): *GPU-based Lens Simulation*, November 2010.

Thomas Bochtler: *Implementation and Validation of a hierarchical GPU-based Lattice-Boltzmann Solver*, June 2010.

Katharina Schwarz: *Text-to-Video: Coherent Image Aggregation from Semantic Text Analysis*, June 2010.

Rene Steiger: *Development of Prototype Touch Panel Gesture Recognition with FlashLite for Mobile Phone UI*, Universität Ulm und Nokia, January 2010.

Manuel Finckh: *Reconstruction from Caustics*, Universität Ulm, August 2009.

Benjamin Steinert: *Simulation of Real Photographic Phenomena in Computer Graphics*, Universität Ulm, March 2009.

Christian Kempter: *Micro-scale BRDF Measurements*, Universität Ulm, March 2009.

Sebastian Knorr: *Catadioptic Stereo Reconstruction of Dynamic Scenes*, Universität Ulm, February 2009.

Henning Peters: *Hardware and Software Extensions for a FTIR Multi-Touch Interface*, Universität des Saarlandes, 2008.

Alexander Reuter (Bachelor): *Design and Implementation of an Efficient Scientific HDR Image Viewer*, Universität des Saarlandes, 2008.

Andreas Steinel: *High Dynamic Range and Tone Mapping for Astronomical Images*, Universität des Saarlandes, 2008

Michael Heinz: *Descattering and Confocal Imaging*, Universität des Saarlandes, 2008.

Miguel Granados: *Background Estimation from Photographs with Application to Ghost Removal in High Dynamic Range Image Reconstruction*, Universität des Saarlandes, 2008.

Christian Weber: *Lucky Exposure Imaging Applied to Small Aperture Telescopes*, Universität des Saarlandes, 2007.

Naveed Ahmed: *BRDF Reconstruction from Video Streams of Multi-View Recordings*, Universität des Saarlandes, 2004.

Martin Fuchs: *Reflectance of Human Faces: Image-Based Measurement and Modeling*, Universität des Saarlandes, 2004.

Gerd Marmitt: *Bild-basierte Rekonstruktion von Frisurgeometrien*, Universität des Saarlandes, 2003.

Oliver Schwinn: *Effiziente Synthese von Lichtfeldern aus Photonenverteilungen*, Universität des Saarlandes, 2002.

## SCIENTIFIC ACTIVITIES

**Associated Editor**

Journal: Computer Graphics Forum

**Scientific Advisory Bord**

Max Planck Center for Visual Computing and Communication
(Saarbrücken - Stanford)

**Program Co-Chair**

IEEE International Conference on Computational Photography (ICCP) 2010

Eurographics Short Papers 2010

Eurographics Symposium on Rendering (EGSR) 2009

Vision, Modeling, and Visualization (VMV) 2007

**International Program Committees**

*2010* SIGGRAPH Asia, ICCP, 3DPVT, VMV, DAGM

*2009* Eurographics, ProCams, VIIP

*2008* ProCams, Eurographics Symposium on Rendering, ACM SIGGRAPH, Eurographics Short Papers, Eurographics Conference, International Conference on Computer Graphics Theory and Application

*2007* Workshop on Photometric Analysis For Computer Vision (PACV) in conjunction with ICCV, International Conference on Visualization, Imaging and Image Processing (VIIP), ACM SIGGRAPH, International Conference on Computer Graphics Theory and Application, Mirage (Computer Vision / Computer Graphics Collaboration Techniques and Applications), Eurographics Symposium on Rendering, International Conference on Computer Graphics Theory and Application

*2006* Eurographics Symposium on Rendering, Computer Graphics International, Graphics Interface

**Reviewer for International Journals and Conferences**

ACM SIGGRAPH, ACM Transactions on Graphics, IEEE Computer Graphics and Applications, IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Transactions on Visualization and Computer Graphics, IEEE International Conference on Computer Vision, EUROGRAPHICS, Computer Graphics Forum, Eurographics Symposium on Rendering, Eurographics Workshop on Rendering, Graphics Interface, Pacific Graphics, Vision, Modeling, and Visualization, Computer Graphics International, WEB3D, Winter School of Computer Graphics, Simulation Practice and Theory.

**Invited Talks**

Universität Siegen, Januar 2012: *Real-time Image Enhancement using Edge-Optimized À-trous Wavelets*

NIPS Workshop Machine Learning meets Computational Photography, Sierra Nevada, December 2011: *Real-time Image Enhancement using Edge-Optimized À-trous Wavelets*

Max-Planck-Institut für Biologische Kybernetik, November 2010: *Edge-optimized Wavelets for Computational Photography*

Danmarks Tekniske Universitet, Kopenhagen, May 2010: *Summer school on Scientific GPU Computing*

Geometry Symposium, Stuttgart, July 2009: *Avoiding and Removing Multiple Scattering*

Universität Magdeburg, June 2009: *Avoiding and Removing Multiple Scattering*.

Geometry Symposium, HTW Stuttgart, May 2009: *Avoiding and Removing Multiple Scattering*.

T.U. Darmstadt, October 2008: *Avoiding Global Illumination Effects*

University College London, April 2008: *3D Scanning and Global Illumination*

T.U. Wien, November 2007: *Towards Omni-directional Reflectance Fields*

Cyberworlds, Hannover, November 2007: *Acquiring Photo-realistic Models with Reflectance Fields*

Hasselt University, July 2007: *Acquiring and Up-sampling Reflectance Fields*

Theory and Practice of Computer Graphics, Bangor, UK, Juni 2007: *Acquisition and Modeling of Global Light Transport using Reflectance Fields*

K.U. Leuven, May 2007: *Light transport matrices*

ETH Zürich, May 2007: *Light transport matrices*

Universität Erlangen-Nürnberg, February 2007: *Akquisition von Reflektanzfeldern*

T.U. Dresden, 2006: *Akquisition von Reflektanzfeldern*

Pixar Animation Studios, 2005: *Dual Photography for Scene Relighting*.

Hewlett Packard Research Labs, 2005: *Dual Photography*.

University of Southern California, 2005: *Properties of the Transport Matrix*.

Industrial Light and Magic, 2004: *Appearance Acquisition*.

Universität Bonn, 2003: *Planned Sampling of Spatially Varying Materials*.

University of British Columbia, 2001: *Image-based Reconstruction of Spatially Varying Materials*.

## PUBLICATIONS

### Books

S. Seipel, H. P. A. Lensch (Eds.). *Proc. Eurographics Short Papers*, Norrköping, Sweden,

H. P. A. Lensch, P.-P. Sloan (Eds.). *Proc. Eurographics Symposium on Rendering 2009*, Computer Graphics Forum 28(2), June 2009.

H. P. A. Lensch, B. Rosenhahn, H.-P. Seidel, P. Slusallek, J. Weickert (Eds.). *Proc. Vision, Modeling, and Visualization (VMV) 2007*, MPI and AKA GmbH, Saarbrücken, Germany, ISBN 978-3-940739-00-1, ISBN 978-3-89838-085-0, 272 pages, November 2007.

H. P. A. Lensch. *Efficient, Image-Based Appearance Acquisition of Real-World Objects*, Cuvillier Verlag, Göttingen, Germany, ISBN 3-89873-996-1, 2004.

### ACM SIGGRAPH

M. B. Hullin, J. Hanika, B. Ajdin, J. Kautz, H.-P. Seidel, H. P. A. Lensch. Acquisition and Analysis of Bispectral Bidirectional Reflectance and Reradiation Distribution Functions. *ACM Transactions on Graphics (Proc. SIGGRAPH'10)*, 2010.

A. B. Adams, E. Talvala, S. H. Park, D. E. Jacobs, B. Ajdin, N. Gelfand, J. Dolson, D. Vaquero, J. Baek, M. Tico, H. P. A. Lensch, W. Matusik, K. Pulli, M. Horowitz, M. Levoy. The Frankencamera: an Experimental Platform for Computational Photography. *ACM Trans. on Graphics (Proc. SIGGRAPH'10)*, 2010.

M. B. Hullin, M. Fuchs, I. Ihrke, H.-P. Seidel, H. P. A. Lensch. Fluorescent Immersion Range Scanning. *ACM Transactions on Graphics (Proc. SIGGRAPH'08)*, 2008.

M. Fuchs, R. Raskar, H.-P. Seidel, H. P. A. Lensch. Towards Passive 6D Displays for Relighting. *ACM Transactions on Graphics (Proc. SIGGRAPH'08)*, 2008.

P. Sen, B. Chen, G. Garg, S. R. Marschner, M. Horowitz, M. Levoy, H. P. A. Lensch. Dual Photography. *ACM Transactions on Graphics (Proc. SIGGRAPH'05)*, 745–755, 2005.

M. Goesele, H. P. A. Lensch, J. Lang, C. Fuchs, H.-P. Seidel. DISCO - Acquisition of Translucent Objects. *ACM Transactions on Graphics (Proc. SIGGRAPH'04)*, 835–844, 2004.

### Journals

H. Dammertz, A. Keller, H. P. A. Lensch. Progressive Point-Light-Based Global Illumination. *Computer Graphics Forum*, 29:2504–2515, 2010.

Tim Weyrich, Jason Lawrence, Hendrik P. A. Lensch, Szymon Rusinkiewicz, Todd Zickler. Principles of Appearance Acquisition and Representation. *Foundations and Trends in Computer Graphics and Vision*, 4(2), 2009.

M. Fuchs, H. P. A. Lensch, V. Blanz, H.-P. Seidel. Adaptive Sampling of Reflectance Fields. *ACM Transactions on Graphics*, 26(2), 2007.

C. Theobalt, N. Ahmed, E. de Auguia, G. Ziegler, H. P. A. Lensch, M. Magnor, H.-P. Seidel. Seeing People in Different Light - Joint Shape, Motion and Reflectance Capture. *IEEE Transactions on Visualization and Computer Graphics*, 13(4), 663–674, 2007.

M. Fuchs, V. Blanz, H. P. A. Lensch, H.-P. Seidel. Reflectance from Images: A Model-Based Approach for Human Faces. *IEEE Transactions on Visualization and Computer Graphics*, 11(3), 296–305, 2005.

H. Yamauchi, H. P. A. Lensch, J. Haber, H.-P. Seidel. Textures Revisited *The Visual Computer*, 21(4), 217–241, 2005.

M. Tarini, H. P. A. Lensch, M. Goesele, H.-P. Seidel. 3D Acquisition of Mirroring Objects. *Graphical Models*, 67(4), 233–259, 2005.

H. P. A. Lensch, J. Kautz, M. Goesele, W. Heidrich, H.-P. Seidel. Image-Based Reconstruction of Spatial Appearance and Geometric Detail. *ACM Transactions on Graphics*, 22(2), 234–257, 2003.

H. P. A. Lensch, M. Goesele, P. Bekaert, J. Kautz, M. Magnor, J. Lang, H.-P. Seidel. Interactive Rendering of Translucent Objects. *Computer Graphics Forum*, 195–205, 2003.

H. P. A. Lensch, W. Heidrich, H.-P. Seidel. A Silhouette-Based Algorithm for Texture Registration and Stitching. *Graphical Models*, 63(4), 245–262, 2001.

## Internationale Konferenzen (Peer-Reviewed)

C. Spika, K. Schwarz, H. Dammertz, H. P. A. Lensch. AVDT - Automatic Visualization of Descriptive Texts. *Vision, Modeling, and Visualization (VMV)*, 2011.

M. B. Hullin, H. P. A. Lensch, R. Raskar, H.-P. Seidel, I. Ihrke. Dynamic Display of BRDFs. *Eurographics*, 2011.

H. Sedding, F. Deger, H. Dammertz, J. Bouecke, H. P. A. Lensch. Massively Parallel Multiclass Object Recognition. *Vision, Modeling, and Visualization (VMV)*, 2010.

S. Menz, H. Dammertz, J. Hanika and M. Weber, H. P. A. Lensch. Graphical Interface Models for Procedural Mesh Growing. *Vision, Modeling, and Visualization (VMV)*, 2010.

K. Schwarz, P. Rojtberg, J. Caspar, I. Gurevych, M. Goesele, H. P. A. Lensch. Text-to-Video: Story Illustration from Online Photo Collections. *Proceedings KES 2010 Invited Session: Workshop on 3D Visualisation of Natural Language*, 2010.

M. Granados, B. Ajdin, M. Wand, C. Theobalt, H.-P. Seidel, H. P. A. Lensch.Optimial HDR Reconstruction with Linear Digital Cameras. *Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2010.

O. Wang, M. Fuchs, C. Fuchs, J. Davis, H.-P. Seidel, H. P. A. Lensch. A Context-aware Light Source. *Proc. IEEE International Conference on Computational Photography (ICCP)*, 2010.

J. Hanika, A. Keller, H. P. A. Lensch. Two-Level Ray Tracing with Reordering for Highly Complex Scenes. *Proc. of Graphics Interface*, 2010.

S. Dammertz, H. Dammertz, A. Keller, H. P. A. Lensch. Textures on Rank-1 Lattices. *Proc. of Pacific Graphics 2009*, (Computer Graphics Forum 28(7)), 2009. (received the PG'09 Distinguished Paper Award).

M. Fuchs, T. Chen, O. Wang, R. Raskar, H.-P. Seidel, H. P. A. Lensch. A Shaped Temporal Filter Camera. *Vision, Modeling, and Visualization (VMV)*, 2009.

W. Matusik, B. Ajdin, J. Gu, J. Lawrence, H. P. A. Lensch, F. Pellacini, S. Rusinkeiewicz. Printing Spatially-Varying Reflectance. *Proc. SIGGRAPH Asia*, 2009.

S. Dammertz, H. Dammertz, A. Keller, H. P. A. Lensch. Textures on Rank-1 Lattices. *Proc. of Pacifica Graphics 2009*, Computer Graphics Forum, 29(7), 2009 – (Distinguished Paper Award).

M. Fuchs, T. Chen, O. Wang, R. Raskar, H.-P. Seidel, H. P. A. Lensch. A Shaped Temporal Filter Camera. *Proc. of Vision, Modeling, and Visualization (VMV)*, 2009.

M. Backes, T. Chen, M. Duermuth, H. P. A. Lensch, M. Welk. Tempest in a Teapot: Compromising Reflections Revisited. *Proc. 30th IEEE Symposium on Security and Privacy*, 2009.

T. Haber, C. Fuchs, P. Bekaert, M. Goesele, H. P. A. Lensch. Relighting Objects from Images Collections. *Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2009)*, 2009.

M. Backes, T. Chen, M. Duermuth, H. P. A. Lensch, M. Welk. Tempest in a Teapot: Compromising Reflections Revisited. *Proc. IEEE Symposium on Security and Privacy*, 2009.

M. B. Hullin, M. Fuchs, B. Ajdin, I. Ihrke, H.-P. Seidel, H. P. A. Lensch. Direct Visualization of Real-World Light Transport. *Proc. Vision, Modeling, and Visualization (VMV)*, 2008.

C. Fuchs, M. Heinz, M. Levoy, H.-P. Seidel, H. P. A. Lensch. Combining Confocal Imaging and Descattering. *Proc. Eurographics Symposium on Rendering 2008*.

B. Ajdin, M. B. Hullin, C. Fuchs, H.-P. Seidel, H. P. A. Lensch. Demosaicing by Smoothing along 1D Features. *Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2008)*, 2008.

T. Chen, H.-P. Seidel, H. P. A. Lensch. Modulated Phase-Shifting for 3D Scanning. *Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2008)*, 2008.

I. Ihrke, K. N. Kutulakos, H. P. A. Lensch, M. Magnor, W. Heidrich. State of the Art in Transparent and Specular Object Reconstruction. *State-of-the-Art-Report – EUROGRAPHICS*, 2008.

M. Granados, H.-P. Seidel, H. P. A. Lensch. Background Estimation from Non-Time Sequence Images. *Proc. Graphics Interface (GI 2008)*, 2008.

A. Linţu, L. Hoffmann, M. Magnor, H. P. A. Lensch, H.-P. Seidel. 3D Reconstruction of Reflection Nebulae from a Single Image. *Proc. Vision, Modeling, and Visualization (VMV)*, 109–116, 2007.

M. Fuchs, H. P. A. Lensch, V. Blanz, H.-P. Seidel. Superresolution Reflectance Fields: Synthesizing images for intermediate light directions. *Proc. EUROGRAPHICS*, 447–456, 2007.

A. Linţu, H. P. A. Lensch, M. Magnor, S. El-Abed, H.-P. Seidel. 3D Reconstruction of Emission and Absorption in Planetary Nebulae. *Proc. IEEE/EG International Symposium on Volume Graphics*, 9–16, 2007.

T. Chen, H. P. A. Lensch, C. Fuchs, H.-P. Seidel. Polarization and Phase-Shifting for 3D Scanning of Translucent Objects. *Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 1–8, 2007.

A. Linţu, H. P. A. Lensch, M. Magnor, T.-H. Lee, S. El-Abed, H.-P. Seidel. Multiwavelength-based Method to de-project Gas and Dust Distributions of several Planetary Nebulae. *Proc. Asymmetrical Planetary Nebulae IV*, 2007.

A. Román, H. P. A. Lensch. Automatic Multiperspective Images. *Proc. Eurographics Symposium on Rendering*, 161–171, 2006.

G. Garg, E.-V. Talvala, M. Levoy, H. P. A. Lensch. Symmetric Photography: Exploiting Data-Sparseness in Reflectance Fields. *Proc. Eurographics Symposium on Rendering*, 251–262, 2006.

B. Chen, H. P. A. Lensch. Light Source Interpolation for Sparsely Sampled Re ectance Fields. *Proc. Vision, Modeling and Visualization (VMV)*, 461–469, 2005

M. Goesele, H. P. A. Lensch, H.-P. Seidel. Validation of Color Managed 3D Appearance Acquisition. *Proc. 12th Color Imaging Conference Color Science and Engineering (CIC12)*, 265-270, 2004.

G. Ziegler, H. P. A. Lensch, A. Naveed, M. Magnor, H.-P. Seidel. Multi-Video Compression in Texture Space. *ICIP2004 – International Conference on Image Processing*, 2467–2470, 2004.

G. Ziegler, H. P. A. Lensch, A. Naveed, M. Magnor, H.-P. Seidel. Multi-Video Compression in Texture Space using 4D SPIHT. *Proc. IEEE International Workshop on Multimedia Signal Processing*, 39–42, 2004.

H. P. A. Lensch, J. Lang, A. M. S'a, H.-P. Seidel. Planned Sampling of Spatially Varying BRDFs.*Proc. EUROGRAPHICS*, 473–482, September 2003.

H. P. A. Lensch, J. Kautz, M. Goesele, J. Lang, H.-P. Seidel. Virtualizing Real-World Objects. *Proceedings of Computer Graphics International 2003*, 134–141, 2003.

H. P. A. Lensch, K. Daubert, H.-P. Seidel. Interactive Semi-Transparent Volumetric Textures. *Proc. Vision, Modeling and Visualization*, 505–512, November 2002.

H. P. A. Lensch, M. Goesele, P. Bekaert, J. Kautz, M. Magnor, J. Lang, H.-P. Seidel. Interactive Rendering of Translucent Objects. *Proc. Pacific Graphics '02*, 214–224, Oktober 2002.

H. P. A. Lensch, J. Kautz, M. Goesele, H.-P. Seidel. 3D Model Acquisition Including Reflection Properties. *Proc. the ECDL Workshop Generalized Documents*, 1–6, September 2001.

H. P. A. Lensch, J. Kautz, M. Goesele, W. Heidrich, H.-P. Seidel. Image-Based Reconstruction of Spatially Varying Materials. *Proc. the 12th Eurographics Workshop on Rendering*, 104–115, Juni 2001.

K. Daubert, H. P. A. Lensch, W. Heidrich, H.-P. Seidel. Efficient Cloth Modeling and Rendering. *Proc. the 12th Eurographics Rendering Workshop*, 63–70, Juni 2001.

M. Goesele, H. P. A. Lensch, W. Heidrich, H.-P. Seidel. Building a Photo Studio for Measurement Purposes. *Proc. Vision, Modeling, and Visualization*, 231–238, November 2000.

H. P. A. Lensch, W. Heidrich, H.-P. Seidel. Automated Texture Registration and Stitching for Real World Models. *Proc. Pacific Graphics*, 317–326, Oktober 2000.

W. Heidrich, H. P. A. Lensch, M. F. Cohen, H.-P. Seidel. Light Field Techniques for Reflections and Refractions. *Proc. 10th Eurographics Rendering Workshop*, 187–196, Juni 1999.

**Tutorials**

T. Weyrich, J. Lawrence, H. P. A. Lensch, S. Rusinkiewicz, T. Zickler – Principles of Appearance Acquisition and Representation. *SIGGRAPH*, August 2008.

O. Bimber, R. Raskar, A. Majumder, H. P. A. Lensch – Projectors for Graphics. *SIGGRAPH*, August 2008.

T. Weyrich, J. Lawrence, H. P. A. Lensch, S. Rusinkiewicz, T. Zickler – Principles of Appearance Acquisition and Representation. *ICCV*, October 2007.

H. P. A. Lensch, M. Goesele, G. Müller. Capturing Reflectance – From Theory to Practice. *Eurographics*, September 2007.

H. P. A. Lensch, M. Goesele, Y.-Y. Chuang, T. Hawkins, S. Marschner, W. Matusik, G. Mueller. Realistic Materials in Computer Graphics. *ACM SIGGRAPH*, August 2005.

R. Ramamoorthi, S. Marschner, S. Boivin, G. Drettakis, H. P. A. Lensch, Y. Yu. Acquiring Material Models Using Inverse Rendering. *ACM SIGGRAPH*, August 2002.

R. Scopigno, C. Anduja, M. Goesele, H. P. A. Lensch. 3D Data Acquisition. *Eurographics*, September 2002.

H.-P. Seidel, M. Goesele, J. Kautz, J. Lang, H. P. A. Lensch. A Framework for the Acquisition, Processing and Interactive Display of High Quality 3D Models. *ACM Solid Modeling*, June 2002.

H. P. A. Lensch, M. Goesele, H.-P. Seidel. A Framework for the Acquisition, Processing and Interactive Display of High Quality 3D Models. *DAGM*, November 2001.