

## Themenliste für das Seminar Computergrafik, Wintersemester 2012/13

### 1 (*Thema vergeben*)

#### **An analytic model for full spectral sky-dome radiance**

Lukas Hosek, Alexander Wilkie

ACM Transactions on Graphics (TOG), Volume 31, Issue 4 (July 2012), Article No. 95

<http://dl.acm.org/citation.cfm?id=2185591>

<http://cgg.mff.cuni.cz/projects/SkylightModelling/>

### 2 (*Thema vergeben*)

#### **Metropolis procedural modeling**

Jerry O. Talton, Yu Lou, Steve Lesser, Jared Duke, Radomír Měch, Vladlen Koltun

ACM Transactions on Graphics (TOG), Volume 30, Issue 2 (April 2011), Article No. 11

<http://dl.acm.org/citation.cfm?id=1944851&bnc=1>

<http://vladlen.info/publications/metropolis-procedural-modeling/>

### 3 (*Thema vergeben*)

#### **Wavelet rasterization**

J. Manson, S. Schaefer

Computer Graphics Forum, Volume 30, Issue 2 (April 2011), pp. 395–404

[http://josiahmanson.com/research/wavelet\\_rasterization/](http://josiahmanson.com/research/wavelet_rasterization/)

<http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8659.2011.01887.x/full>

### 4

#### **On filtering the noise from the random parameters in Monte Carlo rendering**

Pradeep Sen, Soheil Darabi

ACM Transactions on Graphics, Volume 31, Issue 3 (May 2012), Article No. 18

<http://dl.acm.org/citation.cfm?id=2167083>

<http://agl.unm.edu/rpf/>

### 5

#### **Plastic Trees: Interactive self-adapting botanical tree models**

Soren Pirk, Ondrej Stava, Julian Kratt, Michel Abdul-Massih, Boris Neubert, Radomir Mech, Bedrich Benes, Oliver Deussen

ACM Transactions on Graphics (TOG), Volume 31, Issue 4 (July 2012), Article No. 50

<http://dl.acm.org/citation.cfm?id=2185546>

[http://graphics.uni-konstanz.de/publikationen/2012/plastic\\_trees/website/](http://graphics.uni-konstanz.de/publikationen/2012/plastic_trees/website/)

### 6 (*Thema vergeben*)

#### **TreeSketch: interactive procedural modeling of trees on a tablet**

Steven Longay, Adam Runions, Frédéric Boudon, Przemyslaw Prusinkiewicz

Proceedings of the International Symposium on Sketch-Based Interfaces and Modeling (SBIM '12), pp. 107-120, 2012

<http://dl.acm.org/citation.cfm?id=2331083&CFID=175441973&CFTOKEN=87656896>

<http://algorithmicbotany.org/papers/TreeSketch.SBM2012.html>

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**Modeling and generating moving trees from video**

Chuan Li, Oliver Deussen, Yizhe Song, Phil Willis, Peter Hall

ACM Transactions on Graphics (TOG), Volume 30, Issue 6 (December 2011), Article No. 127

<http://dl.acm.org/citation.cfm?id=2024161>

<http://www.cs.bath.ac.uk/~cl249/>

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**A probabilistic model for component-based shape synthesis**

Evangelos Kalogerakis, Siddhartha Chaudhuri, Daphne Koller, Vladlen Koltun

ACM Transactions on Graphics (TOG), Volume 31, Issue 4 (July 2012), Article No. 55

<http://dl.acm.org/citation.cfm?id=2185551>

<http://vladlen.info/publications/a-probabilistic-model-for-component-based-shape-synthesis/>

9 (*Thema vergeben*)

**Re-tiling polygonal surfaces**

Greg Turk

ACM SIGGRAPH Computer Graphics, Volume 26, Issue 2 (July 1992), pp. 55 - 64

<http://dl.acm.org/citation.cfm?id=133994.134008>

<http://www.cc.gatech.edu/~turk/retiler/retiler.html>

10 (*Thema vergeben*)

**Synthetic tree models from iterated discrete graphs**

Ling Xu, David Mould

Proceedings of the 2012 Graphics Interface Conference (GI '12), pp. 149-156, 2012

<http://dl.acm.org/citation.cfm?id=2305301&CFID=175441973&CFTOKEN=87656896>

<http://gigl.scs.carleton.ca/node/411>

11 (*Thema vergeben*)

**Modelling tree structures using a single polygonal mesh**

J. Lluch, R. Vivó, C. Monserrat

Graphical Models, Volume 66, Issue 2 (March 2004), pp. 89–101

[http://www.math.zju.edu.cn/cagd/Seminar/2005\\_AutumnWinter/2005\\_Master\\_HJW\\_ref.pdf](http://www.math.zju.edu.cn/cagd/Seminar/2005_AutumnWinter/2005_Master_HJW_ref.pdf)

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**A runtime cache for interactive procedural modeling**

Tim Reiner, Sylvain Lefebvre, Lorenz Diener, Ismael García, Bruno Jobard, Carsten Dachsbacher

Computers and Graphics, Volume 36, Issue 5 (August, 2012), pp. 366-375

<http://cg.ibds.kit.edu/publikationen.php>

<http://cg.ibds.kit.edu/publications/2012/RuntimeCache/Runtime-Cache-SMI2012.pdf>

**13** (*Thema vergeben*)

**The evolution of swarm grammars – growing trees, crafting art and bottom-up design**

Sebastian von Mammen, Christian Jacob

IEEE Computational Intelligence Magazine, Vol. 4 (2009), No. 3 (10 p.).

[http://www.vonmammen.org/science/CIS\\_SGs.pdf](http://www.vonmammen.org/science/CIS_SGs.pdf)

**14** (*Thema vergeben*)

**A hybrid multiresolution representation for fast tree modeling and rendering**

Javier Lluch, Emilio Camahort, José Luis Hidalgo, Roberto Vivo

Procedia Computer Science 1 (2012), pp. 485-494

<http://www.sciencedirect.com/science/article/pii/S1877050910000530>

**15** (*Thema vergeben*)

**Interactive rendering of trees with shading and shadows**

Alexandre Meyer, Fabrice Neyret, Pierre Poulin

In: 12<sup>th</sup> Eurographics Workshop on Rendering Techniques (2001), pp. 183-196.

<http://hal.inria.fr/docs/00/53/75/04/PDF/MNP01.pdf>