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## **Open Educational Resources in der Akademischen Weiterbildung**

**Carl von Ossietzky Universität Oldenburg** - Institut für Pädagogik  
Zielgruppenanalyse, Change Management  
**Kristina Novy** [kristina.novy@uni-oldenburg.de](mailto:kristina.novy@uni-oldenburg.de) 0441 798-2823

**Bauhaus-Universität Weimar** - Universitätsentwicklung  
Mediendidaktik, Instruktionsdesign und Schulungen  
**Susann Hippler** [susann.hippler@uni-weimar.de](mailto:susann.hippler@uni-weimar.de) 03643 58-1252

**Universität Ulm** - School of Advanced Professional Studies  
Geschäftsmodelle, Lizenzrechte, Autorenverträge, Datenformate, Projektmanagement  
**Kristina Karl** [kristina.karl@uni-ulm.de](mailto:kristina.karl@uni-ulm.de) 0731 50-32404  
**David '-1' Schmid** [david-1.schmid@uni-ulm.de](mailto:david-1.schmid@uni-ulm.de) 0731 50-32401



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**David '-1' Schmid** [david-1.schmid@uni-ulm.de](mailto:david-1.schmid@uni-ulm.de) 0731 50-32401



# Was man sich wünscht

- Einfaches zitieren und verlinken
  - Wer nutzt meine Materialien?
- sinnvolle Verschlagwortung
- Archivierung und Schutz vor kaputten Links.
- Finden und gefunden werden

# Institutionelle Repositorien

## Quasi-Monte Carlo light transport simulation by efficient ray tracing

**Cite as:** Wächter, Carsten (2008): Quasi-Monte Carlo light transport simulation by efficient ray tracing. Open Access Repository der Universität Ulm. Dissertation. <http://dx.doi.org/10.18725/OPARU-974>

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### Author(s)

Wächter, Carsten

### Faculty

Fakultät für Ingenieurwissenschaften und Informatik

### Resource / media type

Dissertation, Text

### Date of activation

2008-01-29

### Abstract

Photorealistic image synthesis can be described by a path integral. This integral is numerically approximated by summing up contributions of transport paths that connect light sources and sensors like e.g. a camera or the eye. The paths are trajectories of Markov processes, whose edges are straight lines along rays of light and whose vertices are light scattering events. [...]

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Monte Carlo method

Ray tracing algorithms

## GND

Computergraphik

Markov-Prozess

Monte-Carlo-Simulation

Ray tracing

## Keywords

Lichttransport

Quasi-Monte-Carlo-Verfahren

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# Suchen, finden und zitiert werden

Quasi-Monte Carlo light transport simulation by



## Quasi-Monte Carlo light transport simulation by efficient ray tracing

C Wächter - 2008 - [oparu.uni-ulm.de](http://oparu.uni-ulm.de)

Photorealistic image synthesis can be described by a path integral. This integral is numerically approximated by summing up contributions of transport paths that connect light sources and sensors like eg a camera or the eye. The paths are trajectories of Markov processes, whose edges are straight lines along rays of light and whose vertices are light scattering events. The goal of this thesis was to accelerate the simulation of light transport, ...



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[A Keller](#), [C Waechter](#) - US Patent 8,248,416, 2012 - Google Patents

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[DG Van Antwerpen](#) - 2011 - repository.tudelft.nl

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## Systems and methods for self-intersection avoidance in ray tracing

[C Özdaç](#), [JR Redgrave](#) - US Patent 8,441,482, 2013 - Google Patents

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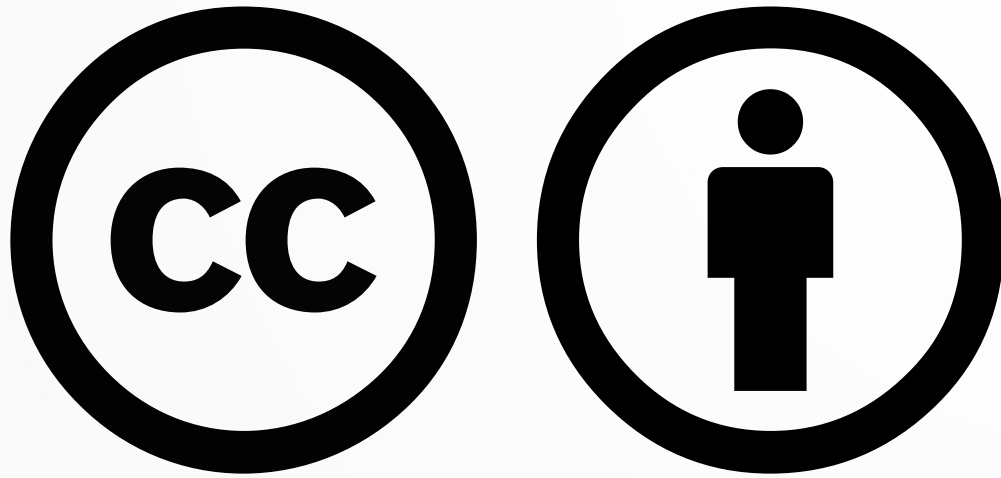
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The screenshot shows the homepage of the HND BW - OER repository. At the top, the logo features a stylized 'HND' with a yellow and black geometric pattern, followed by 'BW - OER' in bold black text and a yellow lion silhouette. To the right, the text reads 'Zentrales Repositorium für OPEN EDUCATIONAL RESOURCES der Hochschulen in Baden-Württemberg'. Below the header is a dark navigation bar with 'Suchumgebung >' and a search input field containing 'Suchen ...'. A yellow bar separates this from the main content area. On the left, a sidebar contains filters for 'Herkunft', 'Schlagworte', and 'Materialart' (with an example 'z.B. Arbeitsblatt, Bild, Übung, ...'). The main content area is divided into 'Sammlungen' and 'Materialien'. Under 'Sammlungen', there are two cards: 'Tübinger Sammlung' (0 items, public) and 'Beispielsammlung' (1 item, public). Under 'Materialien', there are three preview cards, the first showing a document icon and a colorful geometric background.



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