

## A1.2 (K. Busch)

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### Invited Talks at International Conferences

K. Busch, *Higher-order time-domain simulations of Maxwell's equations using Krylov-subspace methods*, Workshop on Numerical Methods for Optical Nanostructures, Zürich, Switzerland, July 2006

K. Busch, *Modified Radiation Dynamics in Nanostructured Materials*, 386. Wilhelm und Else Heraeus Seminar, Bad Honnef, Germany, February 2007

K. Busch, Modelling of Photonic Nanostructures using Krylov-subspace methods, MRS Spring Meeting, San Francisco, U.S.A., April 2007

K. Busch, *Efficient Modelling of Nonlinear Wave Propagation and Radiation Dynamics in Nano-photonics Systems*, 13<sup>th</sup> International Workshop on Optical Waveguide Theory and Numerical Modelling (OWTNM 2007), Copenhagen, Denmark, April 2007

K. Busch, *Time-Domain Simulations of Nonlinear Maxwell's Equations Using Krylov-Subspace Methods*, 6<sup>th</sup> International Congress on Industrial and Applied Mathematics (ICIAM 07), Zürich, Switzerland, July 2007

K. Busch, *Efficient modelling of nonlinear wave propagation and radiation dynamics in nano-photonics systems*, Optics East 2007 (SPIE), Boston, U.S.A., September 2007

K. Busch, *Efficient modelling of light propagation and light-matter interaction in nano-photonics systems*, International Workshop on "Spin- and Optoelectronics", Humboldt-Universität zu Berlin, Germany, September 2007

K. Busch, *Accurate modelling of nano-photonics systems*, DFG-JST Symposium on Nanoelectronics, RWTH Aachen, Germany March 2008

K. Busch, *Efficient modelling of light propagation and light-matter interaction in nano-photonics systems*, International Conference on Computational & Experimental Engineering and Sciences 2008 (ICCES'08), Honolulu, U.S.A., March 2008

K. Busch, *Discontinuous Galerkin Time-Domain Computations of Nano-Photonic Systems*, Photonics North 2009, Quebec City, Canada, May 2009

J. Niegemann, *A very short introduction to the Discontinuous Galerkin Time-Domain (DGTD) approach*, 5<sup>th</sup> Workshop on Numerical Methods for Optical Nano Structures, Zürich, Switzerland, July 2009

K. Busch, *Methodologies for the quantitative theoretical treatment of plasmonic systems*, "Summer school" on Ultrafast Nano optics, Lauterbad, Germany, November 2009

K. Busch, *Advanced Material Models for Nano-Plasmonic Systems*, The 2<sup>nd</sup> Spanish Conference for Nanophotonics CEN 2010, Segovia, Spain, June 2010

K. Busch, *Advanced materials models for nano-plasmonics within a DGTD framework*, 6<sup>th</sup> Workshop on Numerical Methods for Optics Nano Structures, Zürich, Switzerland, July 2010

J. Niegemann, *The Discontinuous Galerkin Time-Domain Method – Introduction and Recent Progress*, 6<sup>th</sup> Workshop on Numerical Methods for Optical Nano Structures, Zürich, Switzerland, July 2010

K. Busch, *Advanced materials models for the analysis of nano-plasmonic systems via DGTD*, SPIE Optics + Photonics 2010, San Diego, U.S.A., August 2010

K. Busch, *Discontinuous Galerkin Methods in Nano-Photonics*, 3<sup>rd</sup> German-Japanese Seminar on Nanophotonics, Ilmenau, Germany, September 2010

J. Niegemann, *Modeling Plasmonic Nanostructures*, International Conference on Frontier Topics in Nanostructures and Condensed Matter Theory, London, Canada, March 2011

K. Busch, *Advanced Material Models for Nano-Plasmonic Systems via Discontinuous Galerkin Methods*, APS March Meeting, Dallas, U.S.A., March 2011

K. Busch, *Few-Photon Transport in Low-Dimensional Systems*, Developments and Prospects in Quantum Impurity Physics QIMP11, Dresden, Germany, June 2011

K. Busch, *Modeling Nano-Plasmonic Systems using Discontinuous Galerkin Methods*, 491<sup>st</sup> Wilhelm and Else Heraeus Seminar *Quantum and Nano Plasmonics*, Bad Honnef, Germany, October 2011

K. Busch, *Modeling Nano-Plasmonic Systems using Discontinuous Galerkin Methods*, Nonlinear Photonics and Complexity, Erice, Sicily, Italy, November 2011