HANS-CHRISTOPH KAISER

PRESENTATIONS

[1] Hans-Christoph Kaiser. Optimal elliptic regularity for some polygonal spatio–material constellations in three–dimensional real space. 6th Singular Days on Asymptotic Methods for PDEs April 29th – May 1st, 2010, Berlin, Weierstrass Institute, 29 April 2010.

[2] Hans-Christoph Kaiser. Transient Kohn-Sham theory. Jubiläumssymposium "Licht – Materialien – Modelle" September 7-8, 2009, Berlin–Adlershof, 8 September 2009.

[3] Hans-Christoph Kaiser. On Kohn-Sham theory. Seminar Modeling of Materials and Semiconductor Devices, WIAS, Berlin, 14 January 2009.

[4] Hans-Christoph Kaiser. A thermodynamic approach to transient Kohn-Sham theory. 100th Statistical Mechanics Conference, Rutgers University, December 13-18, 2008, December 16th 2008.

[5] Hans-Christoph Kaiser. A drift-diffusion model for semiconductors with internal interfaces. Jahrestagung 2008 der Deutschen Mathematiker-Vereinigung an der Friedrich-Alexander-Universität Erlangen-Nürnberg 15-19 September 2008, Minisymposium M2: Analysis of Reaction-Diffusion Systems with Internal Interfaces, 15 September 2008.

[6] Hans-Christoph Kaiser. On drift-diffusion Kohn-Sham theory. 79th Annual Meeting of GAMM, University of Bremen, 31 March – 4 April 2008 Session S13 "Applied Analysis", 1 April 2008.

[7] Hans-Christoph Kaiser. Density functional theory for quantum dots. WIAS-Seminar on Semiconductors, Weierstrass Institute for Applied Analysis and Stochastics, Berlin, 28 November 2007.

[8] Hans-Christoph Kaiser. A drift-diffusion model of transient Kohn-Sham theory. WIAS-Seminar on Semiconductors, Weierstrass Institute for Applied Analysis and Stochastics, Berlin, 22 November 2007.

[9] Hans-Christoph Kaiser. A drift-diffusion model of transient Kohn-Sham theory. First Joint International Meeting between the American Mathematical Society and the Polish Mathematical Society at the University of Warsaw on 31 July — 3 August 2007, 3rd August 2007.

[10] Hans-Christoph Kaiser. A drift-diffusion model with fully nonlocal state equation for heterogeneous semiconductor materials. WIAS–Colloquium, Weierstrass Institute for Applied Analysis and Stochastics, Berlin, 16 April 2007.

[11] Hans-Christoph Kaiser. On quantum transmission. University of Texas at Austin, 9 November 2005.

[12] Hans-Christoph Kaiser. About quantum transmission on an up to three dimensional domain. Eric Jonsson School of Engineering and Computer Science, University of Texas at Dallas, 28 October 2005.

[13] Hans-Christoph Kaiser. Spectral resolution of a velocity field on the boundary of a Lipschitz domain. 2nd Joint Meeting of AMS, DMV, ÖMG, GAMM-SIAM Section "Multiscale Problems, Oscillations in Partial Differential Equations and Homogenization," Johannes Gutenberg University Mainz, 16–19 June 2005.

[14] Hans-Christoph Kaiser. An open quantum system driven by an external flow. Colloque "Problèmes spectraux non-linéaires et modèles de champs moyens," Institut Henri Poincaré, Paris, 4–8 April 2005.

[15] Hans-Christoph Kaiser. Modeling and quasi-3d simulation of Indium grains in (In,Ga)N/GaN quantum wells by means of density functional theory. Physical Colloquium, Brandenburg University of Technology Cottbus, Germany, 15 February 2005.

[16] Hans-Christoph Kaiser. Quasi-3d simulation of multi-excitons by means of density functional theory. Seminar "Numerics and Scientific Computing," Max–Planck–Institute for Mathematics in the Sciences, Leipzig, Germany, 11 January 2005.

[17] Hans-Christoph Kaiser. Density functional theory for multi-excitons in quantum boxes. "Molecular Simulation: algorithmic and mathematical aspects," Institut Henri Poincaré, Paris, France, 1–3 December 2004.

[18] Hans-Christoph Kaiser. Convexity and differentiability of trace functionals. Fourth Workshop "Multiscale problems in quantum mechanics and averaging techniques" in the framework of the DFG Priority Program "Analysis, Modeling and Simulation of Multiscale Problems," Technical University Munich, Germany, 4–5 November 2004.

[19] J. Fuhrmann, H.-Chr. Kaiser, T. Koprucki, and G. Schmidt. Electronic states in semiconductor nanostructures and upscaling to semiclassical models. 5th Colloquium DFG Priority Program "Analysis, Modeling and Simulation of Multiscale Problems," Bad Honnef, Germany, 20–21 May 2004.

[20] Hans-Christoph Kaiser. Convexity of trace functionals and Schroedinger operators. 75th GAMM Annual Scientific Conference, Technical University Dresden, Germany, 21–27 March 2004.

[21] Hans-Christoph Kaiser. Classical solutions of van Roosbroeck's equations with discontinuous coefficients and mixed boundary conditions on two dimensional space domains. 19th GAMM Seminar "High–Dimensional Problems: Numerical treatment and applications," Max–Planck–Institute for Mathematics in the Sciences, Leipzig, Germany, 23–25 January 2003.

[22] Hans-Christoph Kaiser. On space discretization of reaction-diffusion systems with discontinuous coefficients and mixed boundary conditions. 2nd GAMM Seminar "Microstructures" Institute for Mechanics, Ruhr-University Bochum, Germany, 10–11 January 2003.

[23] Hans-Christoph Kaiser. On finite volume methods for reaction–diffusion systems with discontinuous coefficients and mixed boundary conditions. Workshop "Numerical methods for multiscale problems," DFG Priority Program "Analysis, Modeling and Simulation of Multiscale Problems," Max–Planck–Institute for Mathematics in the Sciences, Leipzig, Germany, 13–15 November 2002.

[24] Hans-Christoph Kaiser. Transversal modeling and simulation of edge emitting semiconductor lasers. 2nd International Conference on Numerical Simulation of Semiconductor Optoelectronic Devices (NUSOD), Swiss Federal Institute of Technology (ETH), Zurich, Switzerland, 25–27 September 2002.

[25] J. Fuhrmann, H.-Chr. Kaiser, Th. Koprucki, and G. Schmidt. Multiscale modeling of electronic states in semiconductor nanostructures. 3rd Colloquium DFG Priority Program "Analysis, Modeling and Simulation of Multiscale Problems," Bad Honnef, Germany, 9–12 June 2002.

[26] Hans-Christoph Kaiser. On the embedding of quantum mechanical models into the drift-diffusion model of semiconductor devices. 73th GAMM Annual Scientific Conference, Minisymposium MS11 "Modelling and Analysis in Semiconductor Technology," Augsburg, Germany, 25–28 March 2002.

[27] Hans-Christoph Kaiser. On an open quantum system driven by a macroscopic flow. Workshop "Multi–scale problems in quantum mechanics and averaging techniques," DFG Priority Program "Analysis, Modeling and Simulation of Multiscale Problems," University of Konstanz, Germany, 25–26 October 2001.

[28] Uwe Bandelow and Hans-Christoph Kaiser. Simulation of multi quantum well lasers with WIAS–TeSCA. First SIAM-EMS Conference "Applied Mathematics in our Changing World," Minisymposium 'Laser,' Freie Universität Berlin, Germany, 2–6 September 2001.

[29] Hans-Christoph Kaiser. Macroscopic current induced boundary conditions for Schrödinger–type operators. 3rd International ISAAC Congress, Section V.4 "Spectral theory of differential operators," Freie Universität Berlin, Germany, 20–25 August 2001.

[30] Hans-Christoph Kaiser. About Kohn–Sham systems arising from nanoelectronics. Workshop: "Wavelets and electronical structure calculation," Technical University Chemnitz, Germany, 25–26 January 2001.

[31] Uwe Bandelow, Herbert Gajewski, Hans-Christoph Kaiser, Thomas Koprucki, and Joachim Rehberg. Modeling and simulation of strained quantum wells in semiconductor lasers. Statusseminar 2000 des BMBF–Förderschwerpunktes "Neue Mathematische Verfahren in Industrie und Dienstleistungen," Frankfurt am Main, Germany, 11–12 December 2000.

[32] Herbert Gajewski, Hans-Christoph Kaiser, Hartmut Langmach, and Reiner Nürnberg. 3d–simulation of semiconductor detectors. Statusseminar 2000 des BMBF–Förderschwerpunktes "Neue Mathematische Verfahren in Industrie und Dienstleistungen," Frankfurt am Main, Germany, 11–12 December 2000.

[33] Hans-Christoph Kaiser and Hartmut Langmach. Three dimensional semiconductor device simulation — algorithms and software design. ALGORITMY 2000, Conference on Scientific Computing, Podbanske, Slovakia, 10–15 September 2000.

[34] Hans-Christoph Kaiser and Hartmut Langmach. Three dimensional semiconductor device simulation — 3d effects in X-ray detectors. ALGORITMY 2000, Conference on Scientific Computing, Podbanske, Slovakia, 10–15 September 2000.

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[41] H. Gajewski and H.-Chr. Kaiser. Transversal modeling of semiconductor lasers with ToSCA. Workshop "Scientific Computing in Electrical Engineering," Berlin, Germany, 30 September – 2 October 1998.

[42] Joachim Rehberg and Hans-Christoph Kaiser. A hybrid semiconductor device model including nanostructures. International Congress of Mathematicians, Section 11: Mathematical Physics, Berlin, Germany, 18–27 August 1998. Poster in Section 11. Mathematical Physics.

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