

PERSONAL DATA

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EDUCATION

2002 Ph.D. (Dr. sc. nat.) ETH Zurich (Swiss Federal Institute of Technology)
 1998 B.Sc. (Dipl. Phys. ETH) ETH Zurich

POSITIONS

2008 Assistant Professor Dept. of Math., College of William & Mary
 2005–2008 Research Instructor Dept. of Math., University of Virginia
 2003–2005 Postdoctoral Fellow Dept. of Math., University of British Columbia
 2002–2003 Postdoctoral Researcher Dept. of Math., University of Copenhagen
 1998–2002 Research Assistant Inst. for Theoretical Physics , ETH Zurich

RESEARCH INTERESTS

Mathematical physics and analysis: quantum theory, spectral theory, Schrödinger operators, quantum field theory, random Schrödinger operators (Anderson model), many-body and Coulomb systems, analytic aspects of string theory.

PUBLICATIONS OF DAVID HASLER

Submitted Publications and Preprints

- [12] Analytic perturbation theory and renormalization analysis of matter coupled to quantized radiation, (with M. Griesemer)
submitted. mp_arc 08-20

Publications in Journals

- [11] On the lifetime of quasi-stationary states in non-relativistic QED,
(with I. Herbst and M. Huber)
to appear in Ann. Henri Poincaré. arXiv:0709.3856
- [10] On the self-adjointness and domain of Pauli-Fierz type Hamiltonians,
(with I. Herbst)
to appear in Rev. Math. Phys. arXiv:0707.1713
- [9] On the smooth Feshbach-Schur map, (with M. Griesemer)
erscheint in J. Funct. Anal. arXiv:0704.3244
- [8] Absence of Ground States for a Class of Translation Invariant Models of Non-relativistic QED, (with I. Herbst)
to appear in Commun. Math. Phys. math-ph/0702096
- [7] Absolutely continuous spectrum for the Anderson model on a tree: a geometric proof of Klein's theorem, (with R. Froese and W. Spitzer)
Commun. Math. Phys. **269** (2007), 239–257.
- [6] The Independence on Boundary Conditions for the Thermodynamic Limit of Charged Systems, (with J.P. Solovej)
Commun. Math. Phys. **261** (2006), 549–568
- [5] Transfer matrices, hyperbolic geometry and absolutely continuous spectrum for some discrete Schrödinger operators on graphs, (with R. Froese and W. Spitzer)
J. Funct. Anal. **230** (2006), 184–221.
- [4] Existence of the D0-D4 Bound State: a detailed Proof,
(with L. Erdős and J.P. Solovej)
Ann. Henri Poincaré **6** (2005), no. 2, 247–267.

- [3] The heat kernel expansion for the electromagnetic field in a cavity,
(with F. Bernasconi and G.M. Graf)
Ann. Henri Poincaré **4** (2003), no. 5, 1001–1013.
- [2] No zero energy states for the supersymmetric x^2y^2 potential,
(with G.M. Graf and J. Hoppe)
Lett. Math. Phys. **60** (2002) 191–196.
- [1] Asymptotic form of zero energy wave functions in supersymmetric matrix models,
(with J. Fröhlich, G.M. Graf, J. Hoppe, and S.-T. Yau)
Nucl. Phys. B **567** (2000) 231–248.

Other Publications

- Ph.D. thesis: “Ground State properties of Supersymmetric Matrix Models”, Diss. ETH No. 14783, Advisor: Gian Michele Graf, Co-advisor: Jens Hoppe.
- Diploma thesis: “Supersymmetrische Matrix Modelle”, Supervisor: Gian Michele Graf.
- D. Hasler, J. Hoppe, Asymptotic Factorisation of the Ground-State for SU(N)-invariant Supersymmetric Matrix-Models. [hep-th/0206043](#)
- D. Hasler, J. Hoppe, Zero Energy States of Reduced Super Yang-Mills Theories in $d + 1 = 4, 6$ and 10 dimensions are necessarily Spin(d) invariant. [hep-th/0211226](#)
- G. M. Graf, D. Hasler, J. Hoppe, Vanishing index for supersymmetric 2-matrix model with odd dimensional gauge group. [hep-th/0205285](#)

TEACHING

University of Virginia

- 2007 Fall MATH 310, Introduction to Mathematical Probability.
- 2007 Spring MATH 742, Functional Analysis II (for graduate students).
- 2006 Fall APMA 310, Probability (for engineering majors).
- 2006 Spring APMA 213, Ordinary Differential Equations (for engineering majors).
- 2005 Fall APMA 213, Ordinary Differential Equations (for engineering majors).
- 2005–2007 Organizing and running practice sessions for Putnam competition.

University of British Columbia

- 2005 Spring MATH 101, Integral Calculus.
- 2004 Spring MATH 101, Integral Calculus.

University of Copenhagen

- 2003 Spring Several lectures on “Supersymmetric Yang–Mills Theory and Dimensional Reduction”

ETH Zurich

- 1998 – 2002 Excercise courses in theoretical physics, at the ETH Zurich. Classical mechanics, electrodynamics, quantum mechanics, thermodynamics, and statistical physics.
- 2000 Fall Proseminar about “Light and Quantum mechanics”.
supervising students at ETH Zurich.
- 1998 Spring Proseminar about “Quantum Computers”.
supervising students at ETH Zurich.