

## Bücher

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[1] G. Harutyunyan and B.-W. Schulze, *Elliptic Mixed, Transmission, and Singular Crack Problems*. EMS Tracts in Mathematics Vol. 4, European Math. Soc. Publ. House Zürich, **2008**, 777 pages.

## Referierte Publikationen in Fachzeitschriften

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- [1] *On uniform tangential approximation by lacunary power series on curves in the complex plane* (with V. Martirosian). Izv. Nationalnoi Akademii Nauk Armenii. Matematika. (Russian). J. Contemp. Mathematical Analysis (English). Vol. **28**, No **3**, **1993**, 31-39.
- [2] *On uniform tangential approximation by lacunary power series on Carleman sets* (with V. Martirosian). Izv. Nationalnoi Akademii Nauk Armenii. Matematika. (Russian). J. Contemp. Mathematical Analysis (English). Vol. **30**, No **4**, **1995**, 68-75.
- [3] *On uniform approximation by quasipolynomials with coefficients from a given set*. Dep. In Arm. NIINTI **3**, **1995**.
- [4] *Quasypolynomials in a subspace of continuous functions*. Izv. Nationalnoi Akademii Nauk Armenii. Matematika. (Russian). J. Contemp. Mathematical Analysis (English). Vol. **35**, No **3**, **2000**, 21-32.
- [5] *An algebra of boundary symbols* (with B.-W. Schulze). Izv. Nationalnoi Akademii Nauk Armenii. Matematika. (Russian). J. Contemp. Mathematical Analysis (English). Vol. **37**, No **4**, **2002**, 15-30.
- [6] *Reduction of orders in Boundary Value Problems without the Transmission property* (with B.-W. Schulze). The Mathematical Society of Japan. Vol. **56**, No **1**, **2004**, 65-68.
- [7] *Parametrices of Mixed Elliptic Problems* (with B.-W. Schulze). Math. Nachr., Vol. **277**, **2004**, 56-82.
- [8] *Boundary problems with meromorphic symbols in cylindrical domains* (with B.-W. Schulze). Mathematical Methods in the Applied Sciences. Vol. **28**, Issue **15**, **2005**, 1829-1845.
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- [10] *Four boundary value problems for the Cauchy-Riemann equation in the quarter plane* (with S.A. Abdumanaroy, H. Begehr, A.B. Tungatarov). Eurasian Math. J., No **2**, **2005**, 12-23.
- [11] *Tangential approximation by meromorphic functions*. General Mathematics. Vol. **13**, No **3**, **2005**, 3-14.
- [12] *The relative Index for Corner Singularities* (with B.-W. Schulze). Integral Equations and Operator Theory. Vol. **54**, No **3**, **2006**, 385-426.
- [13] *The Zaremba problem with Singular Interfaces as a Corner Boundary Value Problem* (with B.-W. Schulze). Potential Analysis. Vol. **25**, No **4**, **2006**, 327-369.
- [14] *Mixed Problems and Edge Calculus: Symbolic Structures* (With B.-W. Schulze). Rendiconti del Seminario Matematico dell' Universita' e del Politecnico di Torino. Vol. **64**, No **2**, **2006**, 159-198.
- [15] *Robin boundary value problem for the Poisson equation* (with H. Begehr). Journal of Analysis and Applications. Vol. **4**, No **3**, **2006**, 201-213.
- [16] *Complex boundary value problems in a quarter plane* (with Begehr). Complex Analysis and Applications ; Proc. 13. Intern. Conf. Finite or Infinite Complex Analysis and Appl., Shantou, China, 2005. Eds. Y. wang, S. Wu, H. Wulan, L. Yang. World Sci., New Jersey, **2006**, 1-10.
- [17] *On the Bitsadze operator*. Izv. Nationalnoi Akademii Nauk Armenii. Matematika. Izv. Nationalnoi Akademii Nauk Armenii. Matematika. (Russian). J. Contemp. Mathematical Analysis (English). Vol. **41**, No **4**, **2006**, 36-41.
- [18] *Conormal symbols of mixed elliptic problems with singular interfaces*. Izv. Nationalnoi Akademii Nauk Armenii. Matematika. (Russian). J. Contemp. Mathematical Analysis (English). Vol. **41**, No **4**, **2006**, 42-60.
- [19] *Boundary value problems for Beltrami operator*. Complex Variables. Vol **52**, No **6**, **2007**, 475-484.
- [20] *Mixed Boundary Value Problems and Parametrices in the Edge Calculus* (with N. Dines and B.-W. Schulze). Bulletin des Sciences Mathematiques. Vol. **131**, No **4**, **2007**, 325-360.
- [21] *Boundary value problems in weighted edge spaces* (with B.-W. Schulze). Contemporary Mathematics. Vol **455**, **2008**, 151-167.
- [22] *On uniform tangential approximation by lacunary power series*. In European Women in Mathematics: Proceedings of the 13 th general Meeting, eds Hobbs, C. and Paycha, S., World Scientific Publishing Co., **2010**, 131-142.
- [23] *Holomorphic Besov Spaces in the Polydisc and Bounded Toeplitz Operators* (with A. Harutyunyan). Analysis **99**, **2010**, 1001-1017.
- [24] *Neumann problem for the Beltrami operator and for some second order operators* (with H. Begehr). Complex Variables and Elliptic Equations. Vol. **54**, No **12**, **2009**, 1129-1150.
- [25] *An example on asymptotic expansions on manifolds with corners*. Armen. J. Math. Vol. **3**, No **1**, **2010**, 1-13.

- [26] *On a subclass of approximable functions on closed subsets* (with A. Danielyan). Computational Methods and Function Theory (to appear).
- [27] *Explicit Green operators for quantum mechanical Hamiltonians, I. The hydrogen atom* (with H.-J. Flad, R. Schneider and B.-W. Schulze) (submitted).
- [28] Ellipticity of quantum mechanical Hamiltonians in the edge algebra (with H.-J. Flad) (submitted).

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- [1] *Boundary value problems in the edge pseudo-differential calculus* (with B.-W. Schulze). Institut für Mathematik. Universität Potsdam, **2000/10**.
- [2] *Asymptotics and relative index on a cylinder with conical cross section* (with B.-W. Schulze). Institut für Mathematik. Universität Potsdam, **2002/27**.
- [3] *The Zaremba problem in edge Sobolev spaces* (with B.-W. Schulze). Institut für Mathematik. Universität Potsdam, **2003/13**.
- [4] *A set of tangential approximation with an unbounded Gleason part*. Institut für Mathematik, FU Berlin, **A/03/2005**.

## Thesen

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**Diplomarbeit:** *An example of tangential meromorphic approximation*. Universität Jerewan, Juni **1990**

**Dissertation:** *Uniform-tangential approximation by lacunary power series and quasipolynomials*. Universität Jerewan, Juni **1996**

**Habilitationsschrift:** *Randwertprobleme auf singulären Mannigfaltigkeiten und in der komplexen Ebene*. FU Berlin, Dezember **2007**