

Bernhelm Booss-Bavnbek  
Lektor Emeritus  
Institut for Naturvidenskab og Miljø  
Matematik og Fysik (IMFUFA)  
**Adressestype: Postadresse.**  
Universitetsvej 1  
27.2  
DK-4000  
Roskilde  
Danmark  
**E-mail:** booss@ruc.dk  
**Telefon:** +45 4674 2282  
**Mobil:** +45 5385 1949  
**Hjemmeside:** <http://thiele.ruc.dk/~booss/>, <http://thiele.ruc.dk/~booss/>



## Ansættelse

### Lektor Emeritus

Institut for Naturvidenskab og Miljø  
Roskilde Universitet  
31 dec. 2015 → present

### Matematik og Fysik (IMFUFA)

Roskilde Universitet  
Roskilde, Danmark  
1 feb. 1977 → present

## Publikationer

### Orientation Flow: Review of Nora Doll's recent results

Booss-Bavnbek, B., jan. 2025, I: Zentralblatt MATH (Online). Zbl 07765655, 6 s.

### Science and liability: Exploring the conditions under which mathematicians and other mathematical modellers could be liable

Booss-Bavnbek, B. & Cedervall Lauta, K., 29 dec. 2024, (Under udarbejdelse) I: Journal of Law, Information and Science (JLIS). 30 s.

### 1944–2024, Tribute and review: *Essai on 80 years of mathematical modelling of the geosphere, biosphere and anthroposphere*

Booss-Bavnbek, B., aug. 2024, *Mathematik – anregend oder angeregt?: XVI. Österreichisches Symposium zur Geschichte der Mathematik*. Binder, C. (red.). Wien, s. 137-148 12 s.

### Multiplicity of Time Scales in Complex Systems: Challenges for Sciences and Communication I

Booss-Bavnbek, B. (Redaktør), Christensen, J. H. (Redaktør), Richardson, K. (Redaktør) & Vallès-Codina, O. (Redaktør), apr. 2024, Cham: Springer. 468 s. (Mathematics Online First Collections).

### Multiplicity of Time Scales in Complex Systems: Challenges for Sciences and Communication II

Booss-Bavnbek, B. (Redaktør), Christensen, J. H. (Redaktør), Richardson, K. (Redaktør) & Vallès Codina, O. (Redaktør), mar. 2024, Cham: Springer. 493 s. (Mathematics Online First Collections).

### Zum 80. geburtstag des Bielefelder Mathematikhistorikers Gert Schubring: erinnerungen eines weggefährten

Booss-Bavnbek, B., 23 feb. 2024, 4 s. Roskilde : Roskilde Universitet.

### Arven efter Kissinger: Hybris over påstået forudsigelighed, rationalitet og realisme i politik

Booss-Bavnbek, B., 7 jan. 2024, 3 s. Roskilde : Roskilde Universitet.

**Leben in einer mathematisierten Welt? Stärken und Grenzen mathematischer Denkart und mathematisch gestützter Technologie**

Booss-Bavnbek, B., 2024, (Under udarbejdelse) Springer Science+Business Media. 350 s.

**Nekrolog for Heinz Kissinger (1923-2023): Forudsigelighed, rationalitet og realisme i Kissingers politik?**

Booss-Bavnbek, B., 2024, (Under udarbejdelse) 2 s.

#### Preface

Booss-Bavnbek, B., Christensen, J. H., Richardson, K. & Vallès Codina, O., dec. 2023, *Multiplicity of Times Scales in Complex Systems: Challenges for Sciences and Communication I*. Booss-Bavnbek, B., Christensen, J. H., Richardson, K. & Vallès Codina, O. (red.). Cham: Springer, s. ix - xiii 5 s. (Mathematics Online First Collections).

#### The Dichotomy of Forms and Operators and the Role of Green's Forms

Booss-Bavnbek, B., Zhu, C., Portaluri, A. & Ji, Y., dec. 2023, *Trails in Modern Theoretical and Mathematical Physics: A Volume in Tribute to Giovanni Morchio*. Cintio, A. & Michelangeli, A. (red.). Cham: Springer Nature Switzerland AG, s. 53-70 18 s.

#### With Gianni Morchio at the Interface Between Mathematics and Physics

Booss-Bavnbek, B., dec. 2023, *Trails in Modern Theoretical and Mathematical Physics: A Volume in Tribute to Giovanni Morchio*. Cintio, A. & Michelangeli, A. (red.). Cham: Springer, s. 255-261 7 s.

#### Emergence of a Multiplicity of Time Scales in the Modelling of Climate, Matter, Life, and Economy

Booss-Bavnbek, B., Pedersen, R. K. & Pedersen, U. R., 8 nov. 2023, *Multiplicity of Time Scales in Complex Systems: Challenges for Sciences and Communication II*. Booß-Bavnbek, B., Hesselbjerg Christensen, J., Richardson, K. & Vallès Codina, O. (red.). Cham: Springer, s. 365-462 98 s. 12. (Mathematics Online First Collections).

#### 30 år Sovjetunionens kultur-, uddannelses-, miljø- og naturvidenskabspolitik: Stalins arv 70 år efter hans død

Booss-Bavnbek, B., nov. 2023, I: Skub: Information • Debat • Aktivitet. 2023, 4, s. 22-25

#### Continuity of families of Calderón projections

Zhou, Y., Booß-Bavnbek, B., Deng, J. & Zhu, C., 15 okt. 2023, I: Journal of Functional Analysis. 285, 8, 110069.

**Nirenberg, David and Nirenberg, Ricardo L., Uncountable. A philosophical history of number and humanity from antiquity to the present. (English): A philosophical history of numbers and humanity deserves more!**

Booss-Bavnbek, B., apr. 2023, I: Zentralblatt MATH (Online). 2023, 4 s., 1514.01002.

**Klapper, Isaac; Szyld, Daniel B.; Zhao, Kai Metabolic networks, elementary flux modes, and polyhedral cones. (English) Understanding bioenergetics: are we well on the way?**

Booss-Bavnbek, B., jan. 2023, I: Zentralblatt MATH (Online). 2023, 1, 3 s., 1484.92002.

#### Multiplicity of time scales in complex systems: Challenges for sciences and dissemination I

Booss-Bavnbek, B. (Redaktør), Hesselbjerg Christensen, J., Richardson, K. & Vallès-Codina, O., jan. 2023, Springer. (Mathematics Online First Collections).

**Bair, J.; Błaszczyk, P.; Ely, R.; Henry, V.; Kanovei, V.; Katz, K. U.; Katz, M. G.; Kudryk, T.; Kutateladze, S. S.; McGaffey, T.; Mormann, T.; Schaps, D. M.; Sherry, D. Cauchy, infinitesimals and ghosts of departed quantifiers. (English): Dealing with dissent**

Booss-Bavnbek, B., jan. 2022, I: Zentralblatt MATH (Online). 2022, 3 s., 070537961.

#### Fachwissenschaften und Leitung der Gesellschaft

Booss-Bavnbek, B. & Høyrup, J., sep. 2021, I: Forum Wissenschaft. 38, 3, s. 55-58

**Dinamica e controllo del Covid-19: commenti di due matematici**

Booss-Bavnbek, B. & Krickeberg, K., 27 jun. 2021, I: Ithaca: Viaggio nella Scienza. 17, s. 15-37 23 s.

**Conference Call: Multiplicity of time scales in complex systems: Challenges for sciences and dissemination**

Booss-Bavnbek, B., Pedersen, U. R., Jacobsen, S. G. & Kaas, E., maj 2021, Roskilde Universitet.

**Động lực học và điều khiển của Covid-19: Nhận xét của hai nhà toán học**

Booss-Bavnbek, B. & Krickeberg, K., 2021, (Under udarbejdelse) I: Vietnam Journal of Preventive Medicine-VJPM.

**Continuity of family of Calderón projections**

Booss-Bavnbek, B., Zhu, C., Zhou, Y. & Deng, J., 6 dec. 2020, ArXiv.org - Cornell University, 35 s.

**Dynamik und Kontrolle von Covid-19: Kommentare zweier Mathematiker**

Booss-Bavnbek, B. & Krickeberg, K., 6 dec. 2020, Roskilde Universitet. 22 s.

**Dynamik og control af Covid-19: To matematikeres kommentarer**

Booss-Bavnbek, B. & Krickeberg, K., 24 sep. 2020, I: Matilde. 2020, 56, s. 4-19 16 s.

**Dynamics and Control of Covid-19: Comments by Two Mathematicians**

Booss-Bavnbek, B. & Krickeberg, K., 1 sep. 2020, I: EMS Newsletter. 2020, 117, s. 29-37 9 s.

**Emergence of multiplicity of time scales in the modeling of climate, matter, life, and economy**

Booss-Bavnbek, B., Pedersen, U. R. & Pedersen, R. K., 1 jul. 2019, ArXiv.org - Cornell University, 55 s.

**China can decrease leverage by levying real estate tax**

Booss-Bavnbek, B. & Yu, C., 8 apr. 2019, I: Shenzhen Daily. 1 s.

**Emergence of multiple time scales: Contribution to International Conference on Transforming for Sustainability**

Booss-Bavnbek, B., Pedersen, U. R. & Pedersen, R. K. (Medlem af forfattergruppering), 28 nov. 2018.

**Straf Danske Bank for hvidvask - det er ikke nok at sige undskyld**

Booss-Bavnbek, B., 15 aug. 2018, I: Information.

**China's debt threat and the price of apartments**

Booss-Bavnbek, B. & Yu, C., 13 aug. 2018, I: Financial Times. 2018

**Venezuela efter valget**

Booss-Bavnbek, B., 1 jun. 2018, I: Dagbladet Arbejderen.

**Obituary: Philip J. Davis**

Booss-Bavnbek, B. & Booss-Bavnbek, S., maj 2018, I: S I A M News. 51, 4, s. 3 1 s.

**The Maslov index in symplectic Banach spaces**

Booss-Bavnbek, B. & Zhu, C., 2 apr. 2018, I: Memoirs of the American Mathematical Society. 252, 1201, s. 1-134 123 s.

**Ansichtennachlese zur Oktoberrevolution: Zeitgenössische Ansichten aus drei sehr unterschiedlichen Perspektiven**

Booss-Bavnbek, B., 31 mar. 2018, I: Forum Wissenschaft. 35, 1, s. 43-46 5 s.

**Nøgtern analyse, tak!**

Booss-Bavnbek, B., 7 nov. 2017, (Ikke-udgivet) 2 s..

**Okttoberrevolutionen i broget fokus**

Booss-Bavnbek, B., 3 nov. 2017, I: Dagbladet Arbejderen. 3.november 2017, 3 s.

**Crossroads in the process of mathematization exemplified by early astronomy**

Booss-Bavnbek, B., 11 okt. 2017. 9 s.

**Man skal anerkende Okttoberrevolutionens kamp for social lighed**

Booss-Bavnbek, B., 5 sep. 2017, I: Dagbladet Information.

**Mathematics: Easy and Hard. Why?**

Booss-Bavnbek, B., sep. 2017, I: Mathematical Intelligencer. 39, 3, s. 61-72 12 s.

**Towards a canon of mathematization**

Booss-Bavnbek, B., 18 aug. 2017. 5 s.

**Hvad sker der egentlig i Venezuela? Kan Venezuela ses som laboratorium for vores tid, det 21. århundrede?**

Booss-Bavnbek, B. & Hansen, A., 22 nov. 2016

**David D. Bleecker (1948–2016)**

Booss-Bavnbek, B. & Csordas, G., aug. 2016, I: Notices of the American Mathematical Society. 63/7, s. 828-828 1 s.

**Interfaces between Geometric Analysis and Mathematical Physics: July 2016, Scientific report**

Booss-Bavnbek, B., Lesch, M., Marinescu, G., Reshetikhin, N. & Vertman, B., 10 jul. 2016, 1 s.

**Vi er ved at indføre en ny slags systemkontrol**

Booss-Bavnbek, B., 6 apr. 2016, I: Politiken.

**North Korea claims first hydrogen bomb test: Mathematical verification aspects**

Booss-Bavnbek, B., 7 jan. 2016, I: Financial Times. 1 s.

**Livtag med fem flygtningemyter**

Booss-Bavnbek, B. & Hansen, A., 17 nov. 2015, I: Altinget | Justits. 2015-11-17, 3 s.

**Booss-Bavnbek on Fefferman**

Booss-Bavnbek, B., 1 jun. 2015, I: Zentralblatt für Mathematik und ihre Grenzgebiete. Zbl 062206015, 3 s.

**The multi-dimensional Morse-Smale index**

Booss-Bavnbek, B., 20 feb. 2015

**Albin, Pierre; Rochon, Frederic: Some index formulae on the moduli space of stable parabolic vector bundles**

Booss-Bavnbek, B., 2015, I: Zentralblatt für Mathematik und ihre Grenzgebiete. Zbl 062139594, 2 s.

**Li, Ping: The rigidity of Dolbeault-type operators and symplectic circle actions**

Booss-Bavnbek, B., 2015, I: Zentralblatt für Mathematik und ihre Grenzgebiete. Zbl 060388311, 2 s.

**Rückblick auf die Hamburger Jahrestagung der DMV**

Booss-Bavnbek, B., 2015, 1 s..

**On the difficulties of acquiring mathematical experience: Case rural education: Sobre as dificuldades na aquisição da experiência matemática: Caso da educação rural**

Booss-Bavnbek, B., 23 jul. 2014, I: EM TEIA | Revista de Educação Matemática e Tecnológica Iberoamericana. 5, 1, s. 1-17 17 s.

**The Maslov index in symplectic Banach spaces**  
Booss-Bavnbek, B. & Zhu, C., 3 jun. 2014

**Another jewel of a paper: Comments to P.J. Davis, "The relevance of the irrelevant beginning"**  
Booss-Bavnbek, B., 23 apr. 2014, I: ScienceOpen. 2014, 3 s.

**Index Theory with Applications to Mathematics and Physics**  
Booss-Bavnbek, B. & Bleecker, D., 5 okt. 2013, Somerville, MA (USA): International Press of Boston, Inc. 792 s.

**The Maslov index in weak symplectic functional analysis**  
Booss-Bavnbek, B. & Zhu, C., okt. 2013, I: Annals of Global Analysis and Geometry. 44, 3, s. 283-318 36 s.

**Is mathematics invading human cells? Impressions from a collaboration with diabetes doctors**  
Booss-Bavnbek, B., 1 mar. 2013, I: Mathematical Intelligencer. 35, 1, s. 6-15 10 s.

**Unity and Disunity in Mathematics**  
Booss-Bavnbek, B. & Davis, P. J., 1 mar. 2013, I: EMS Newsletter. 87, s. 28-31 4 s.

**Zeit und Verstehen: Verstehen braucht Zeit. Zeit braucht Verstehen.**  
Booss-Bavnbek, B., 2 nov. 2012, *Per Anhalter durch die Turing-Galaxis*. Kurz, C. (red.). Monsenstein und Vannerdat, s. 1-2 2 s.

**Matematikken på vej ind i cellerne? Indtryk fra et samarbejde med diabeteslæger**  
Booss-Bavnbek, B., apr. 2012, I: Matilde. 44, s. 4-10 7 s.

**Unity in Major Themes: Convergence vs. Arbitrariness in the Development of Mathematics**  
Booss-Bavnbek, B. & Davis, P. J., apr. 2012. 9 s.

**Alan Turings Wirken in Münster - Kommentar: Es gab aber auch einen anderen Hasenjaeger**  
Booss-Bavnbek, B., 2012, I: D M V - Mitteilungen. 20, 2, s. 69-70 2 s.

**Om at klippe og klistre bølgelængder: Spot på forskningen**  
Booss-Bavnbek, B., 2012, Årsberetning 2011 . Roskilde: Roskilde Universitet, s. 80-81 2 s. (Roskilde Universitetscenter. Årsberetning, Bind 2011).

**Perturbation of sectorial projections of elliptic pseudo-differential operators**  
Booss-Bavnbek, B., Chen, G., Lesch, M. & Zhu, C., 2012, I: Journal of Pseudo-Differential Operators and Applications. 3, 1, s. 49-79 31 s.

**Towards a nano geometry? Geometry and dynamics on nano scale**  
Booss-Bavnbek, B., 2012, I: Contemporary Mathematics. 584, s. 147-162 16 s.

**BetaSys: Systems Biology of Regulated Exocytosis in Pancreatic Beta-Cells**  
Booss-Bavnbek, B. (Redaktør), Klösgen, B. (Redaktør), Larsen, J. K. (Redaktør), Pociot, F. M. (Redaktør) & Renström, E. (Redaktør), 29 jan. 2011, New York: Springer. 558 s. (Systems Biology, Bind 2).

**Geometric and electromagnetic aspects of fusion pore making**  
Booss-Bavnbek, B., Apushkinskaya, D., Apushkinskyi, E. & Koch, M., 29 jan. 2011, *BetaSys: Systems Biology of Regulated Exocytosis in Pancreatic Beta-Cells*. Booss-Bavnbek, B., Klösgen, B., Larsen, J., Pociot, F. & Renström, E. (red.). New York: Springer Science+Business Media, s. 505-538 34 s. (Systems Biology, Bind 2).

**Preface, BetaSys: Systems Biology of Regulated Exocytosis in Pancreatic Beta-Cells**

Booss-Bavnbek, B., Klösgen, B., Larsen, J. K., Pociot, F. M. & Renström, E., 29 jan. 2011, *BetaSys: Systems Biology of Regulated Exocytosis in Pancreatic Beta-Cells*. New York: Springer Science+Business Media, s. v-vii 3 s. (Systems Biology, Bind 2).

**Basic Functional Analysis Puzzles of Spectral Flow**

Booss-Bavnbek, B., 2011, I: Journal of the Australian Mathematical Society. 90, s. 145–154 10 s.

**Perturbation of Sectorial Projections of Elliptic**

Booss-Bavnbek, B., Chen, G., Lesch, M. & Zhu, C., 29 dec. 2010

**Flower Power i Hyderabad: Indtryk fra den Internationale Matematikerkongress ICM 2010, Hyderabad, 19.-27. august 2010**

Booss-Bavnbek, B., okt. 2010, I: Matilde. 40, s. 4-6 3 s.

**Flower Power in Hyderabad: Eindrücke vom ICM 2010**

Booss-Bavnbek, B., sep. 2010, I: Mitteilungen der Deutschen Mathematiker-Vereinigung (DMV). 18, 3, s. 148-152 5 s.

**Intra-cellular Control of Insulin Secretion**

Booss-Bavnbek, B., 16 aug. 2010

**New Paths Towards Quantum Gravity**

Booss-Bavnbek, B. (Redaktør), Esposito, G. (Redaktør) & Lesch, M. (Redaktør), maj 2010, Heidelberg: Springer. (Lecture Notes in Physics; Nr. 807).

**Preface: New Paths Towards Quantum Gravity**

Booss-Bavnbek, B., Esposito, G. & Lesch, M., maj 2010, *New Paths Towards Quantum Gravity*. Heidelberg: Springer, s. ix-xiv 6 s. (Lecture Notes in Physics; Nr. 807).

**Capturing Structure and Function of The Human Cell: Through Future and Emerging ICT**

Booss-Bavnbek, B., 22 jan. 2010

**Lecture Notes in Physics: Preface**

Booß-Bavnbek, B., Esposito, G. & Lesch, M., 2010, *New Paths Towards Quantum Gravity*. Booss-Bavnbek, B. (red.). s. ix-xiv (Lecture Notes in Physics, Bind 807).

**Steps Towards Quantum Gravity and the Practice of Science: Will the Merger of Mathematics and Physics Work?**

Booss-Bavnbek, B., 2010, *New Paths Towards Quantum Gravity*. Booß-Bavnbek, B., Esposito, G. & Lesch, M. (red.). Springer, Bind 807. s. 339-354 17 s. (Lecture Notes in Physics).

**The invertible double of elliptic operators**

Booss-Bavnbek, B. & Lesch, M., 29 jan. 2009, I: Letters in Mathematical Physics. 87, 1-2, s. 19-46 26 s.

**Continuous Variation of Cauchy data spaces. Task - results - Open Problems**

Booss-Bavnbek, B., Lesch, M. & Zhu, C., 2009, arXiv:0911.4460v1 [math.DG]: ArXiv.org - Cornell University, 4 s.

**Geometric and electromagnetic aspects of fusion pore making**

Apushkinskaya, D., Apushkinskyi, E., Booss-Bavnbek, B. & Koch, M., 2009, arXiv:0912.3738v1 [math.AP]: ArXiv.org - Cornell University, 30 s.

**Random curves - Journeys of a mathematician by Neal Koblitz**

Booss-Bavnbek, B., 2009, I: Mathematical Intelligencer. 31, 4, s. 65-67 3 s.

**REx Workshop "Systems Biology of Regulated Exocytosis in Pancreatic Beta-Cells: Copenhagen, February 17-18, 2009**  
Booss-Bavnbek, B. (Producent), 2009

**Steps towards "Quantum Gravity" and the practice of science. Will the merger of mathematics and physics work?**  
Booss-Bavnbek, B., 2009, ArXiv.org - Cornell University, 17 s.

**The Calderón projection: New definition and applications**

Booss-Bavnbek, B., Lesch, M. & Zhu, C., 2009, I: Journal of Geometry and Physics. 59, 7, s. 784-826 43 s.

**The mathematical microscope in bio-medicine, Colloquium, Bonn, Hausdorffzentrum, Okt. 2009: Traditional vs. New, Organs and Organisms, Populations, Diabetes mellitus: Medical Pull and Scientific-Technological Push**  
Booss-Bavnbek, B., 2009, 35 s.

**The mathematization of the individual sciences - revisited**

Booss-Bavnbek, B., 2009, I: Journal of Contemporary Mathematical Analysis - Armen Acad Scienc. 44, 2, s. 81–96 16 s.

**Jeder ist Sieger: Debatte. Bernhelm Booß-Bavnbek führte an der Uni Bonn den ersten linken Asta, Gerd Langguth kämpfte im RCDS. Der RM hat beiden dieselben zehn Fragen gestellt. Was bleibt von der alten Kluft?**  
Booss-Bavnbek, B., 3 jan. 2008, I: Rheinischer Merkur. 2008, 1, s. 8-8 1 s.

**Krzysztof P. Wojciechowski (1953-2008)**

Booss-Bavnbek, B. & Kaminker, J., 2008, I: Notices of the American Mathematical Society. 55, 9, s. 1109-1109 1 s.

**The Calderon Projection: New Definition and Applications**

Booss-Bavnbek, B., Lesch, M. & Zhu, C., 2008, www.arxiv.org: ArXiv.org - Cornell University. 58 s.

**The invertible double of elliptic operators**

Booss-Bavnbek, B., Lesch, M. & Zhu, C., 2008, www.arxiv.org: ArXiv.org - Cornell University. 5 s.

**The Geometry and Dynamics of the Bilayer Membrane-Vesicle Fusion Event in Animal Cells – An Invitation: Based on joint ongoing work with D. Apushkinskaya (Saarbrücken), M. Koch (München and Copenhagen) and N. Ural'tseva (St. Petersburg), Applied Analysis Meeting, 16-18 Aug. 2007, København**  
Booss-Bavnbek, B., 20 aug. 2007, Roskilde

**The Calderón Projection of Elliptic Differential Operators: New Definition and New Applications**

Booss-Bavnbek, B., 17 mar. 2007, Roskilde

**Quantitative and Qualitative Aspects of the Spread of Methicillin Resistant *Staphylococcus aureus* (MRSA): The Austin-Kakehashi-Anderson Model Revisited**  
Booss-Bavnbek, B., 5 jan. 2007, Roskilde

**Manch ein Professor unterstützte uns**

Booss-Bavnbek, B., 2007, *Protest und Provokation: Bonner Studenten 1967/1968*. Bothien, H.-P. (red.). Essen: Klartext Verlag, s. 113-114 2 s.

**Proceedings of the Workshop on Mathematical Modeling of Membrane Processes in Animal Cells: Roskilde University, Denmark, 29 June - 1 July 2006**  
Booss-Bavnbek, B., Otto, A. M., Pedersen, M. & Shilcock, J., 2007, Singapore and London: World Scientific. 122 s. (Biophysical Reviews and Letters; Nr. Special Issue).

**Quantum Gravity: Unification of Principles and Interactions, and Promises of Spectral Geometry**

Booss-Bavnbek, B., Esposito, G. & Lesch, M., 2007, I: SIGMA. Symmetry, Integrability and Geometry. 3, 29 s.

**Quantum gravity: unification of principles and interactions, and promises of spectral geometry.**

Booss-Bavnbek, B., Esposito, G. & Lesch, M., 2007, www: ArXiv.org - Cornell University, s. 1-23, 23 s.

**Quantum gravity: Unification of principles and interactions, and promises of spectral geometry**

Booss-Bavnbek, B., Esposito, G. & Lesch, M., 2007, I: Symmetry, Integrability and Geometry: Methods and Applications (SIGMA). 3, 29 s., 098.

**Towards modeling of membrane processes in animal cells**

Booss-Bavnbek, B., Otto, A. M., Pedersen, M. & Shillcock, J., 2007, I: Biophysical Reviews and Letters. 2, 1, s. 1-4 4 s.

**Unis wohin? Die Top-down Erneuerung in Dänemark und anderswo**

Booss-Bavnbek, B., 2007, I: Forum Wissenschaft. 24, 2, s. 42-42 1 s.

**Preface**

Booß-Bavnbek, B., Klimek, S., Lesch, M. & Zhang, W., 1 jan. 2006, *Analysis, Geometry and Topology of Elliptic Operators: Papers in Honor of Krzysztof P Wojciechowski*. World Scientific, s. ix-xi

**Analysis, Geometry and Topology of Elliptic Operators: Papers in Honour of K. P. Wojciechowski. Proceedings of a Workshop. May 2005, Roskilde**

Booss-Bavnbek, B. (Redaktør), Klimek, S. (Redaktør), Lesch, M. (Redaktør) & Zhang, W. (Redaktør), 2006, London, Singapore: World Scientific. 552 s.

**Stor matematik mellem Prado og Escorial: Personlige indtryk fra ECM 2006, Madrid**

Booss-Bavnbek, B., 2006, I: Matilde. 29, s. 13-17 5 s.

**General spectral flow formula for fixed maximal domain**

Booss-Bavnbek, B. & Zhu, C., 2005, I: Central European Journal of Mathematics. 3, 3, s. 558-577 20 s.

**Spectral Geometry of Manifolds with Boundary and Decomposition of Manifolds: Proceedings of a Workshop, August 2003, Roskilde University, Denmark**

Booss-Bavnbek, B. (Forlag), Grubb, G. (Forlag) & Wojciechowski, K. P. (Forlag), 2005, Providence, R.I., U.S.A.: American Mathematical Society. 328 s. (Contemporary Mathematics; Nr. 366).

**Unbounded Fredholm operators and spectral flow**

Booss-Bavnbek, B., Phillips, J. & Lesch, M., 2005, I: Canadian Journal of Mathematics - Journal Canadien de Mathématiques. 57, 2, s. 225-250

**Was bedeutet die Mathematisierung des Krieges?**

Booss-Bavnbek, B., 2005, I: FIFF-Kommunikation. 22, 2/2005, s. 27-33 7 s.

**Mathematik und Krieg**

Booss-Bavnbek, B., 2004, I: Blatter für Deutsche und Internationale Politik. 11, s. 1382-1391

**Spectral invariants of operators of Dirac type on partitioned manifolds**

Booss-Bavnbek, B. & Bleecker, D., 2004, *Aspects of Boundary Problems in Analysis and Geometry*. Gil, J. B., Krainer, T. & Witt, I. (red.). Basel: Birkhäuser Verlag, s. 1-130

**Weak symplectic functional analysis and general spectral flow formula**

Booss-Bavnbek, B. & Zhu, C., 2004, math.DG/0406139 udg. Los Alamos, USA: ArXiv.org - Cornell University. 57 s.

**Introduction**

Booss-Bavnbek, B. & Høyrup, J., 2003, *Mathematics and war*. Booss-Bavnbek, B. & Høyrup, J. (red.). Basel: Birkhäuser Verlag, s. 1-19

**Matematica e guerra**

Booss-Bavnbek, B. & Høyrup, J., 2003, I: Lettera Matematica Pristem. 47, s. 5-12

**Mathematics and war: an invitation to revisit**

Booss-Bavnbek, B. & Høyrup, J., 2003, I: Mathematical Intelligencer. 25, 3, s. 12-25 14 s.

**Mathematics and war**

Booss-Bavnbek, B. (Redaktør) & Høyrup, J. (Redaktør), 2003, Basel: Birkhäuser Verlag. 416 s.

**Agora: mathematics, mathematics education and war**

Booss-Bavnbek, B., 2002, *Proceedings of the Third International Mathematics Education and Society Conference: Elsingore, Denmark, April 2002*. Valero, P. & Skovsmose, O. (red.). Roskilde / Aalborg: Centre for Research in Learning Mathematics

**Feature: mathematics and war**

Booss-Bavnbek, B. & Høyrup, J., 2002, I: EMS Newsletter. 46, s. 20-22

**ICM 2002 i Beijing**

Booss-Bavnbek, B., 2002, I: Matilde. 14, s. 14-15

**Spectral flow of paths of self-adjoint Fredholm operators**

Booss-Bavnbek, B., Lesch, M. & Phillips, J., 2002, I: Nuclear physics B, Proceedings supplements. 104, 1-3, s. 177-180

**Weak UCP and perturbed monopole equations**

Booss-Bavnbek, B., Marcolli, M. & Wang, B.-L., 2002, I: International Journal of Mathematics. 13, 9, s. 987-1008 20 s.

**Weak UCP and perturbed monopole equations**

Booss-Bavnbek, B., Marcolli, M. & Want, B.-L., 2002, Roskilde: Roskilde Universitet. 28 s. (Tekster fra IMFUFA; Nr. 408).

**Criss-cross reduction of the Maslov index and a proof of the Yoshida-Nicolaescu theorem**

Booss-Bavnbek, B., Furutani, K. & Otsuki, N., 2001, I: Tokyo Journal of Mathematics. 24, 1, s. 113-128

**Unbounded Fredholm operators and spectral flow**

Booss-Bavnbek, B., Lesch, M. & Phillips, J., 2001, Roskilde: Roskilde Universitet. 32 s. (Tekster fra IMFUFA; Nr. 407).

**Bedre miljø med matematiske modeller?**

Booss-Bavnbek, B., 2000, I: Miljoesk. 19, s. 4-9

**The geometry of cauchy data spaces: this report is dedicated to the memory of Jean Leray (1906-1998)**

Booss-Bavnbek, B., Furutani, K. & Wojciechowski, K. P., 2000, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 385).

**Unique continuation property for dirac operators, revisited**

Booss-Bavnbek, B., 2000, I: Contemporary Mathematics. 258, s. 21-32

**Boundary reduction of spectral invariants and unique continuation property**

Booss-Bavnbek, B., 1999, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 367).

**Criss-cross reduction of the Maslov index and a proof of the Yoshida-Nicolaescu theorem**

Booss-Bavnbek, B., 1999, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 199).

**Facts and fiction of the Kosovo war: new qualities of warfare?**

Booss-Bavnbek, B., Jørgensen, B. C. & Rasmussen, R. O., 1999, *The Kosovo war in the rear-view mirror of science: conference on the war catastrophe, Roskilde University, November 1999*. Czeskleba-Dupont, R. & Rasmussen, R. O. (red.). Roskilde: Roskilde Universitet, (Publikationer fra Institut for geografi og internationale udviklingsstudier. Arbejdspapir; Nr. 154).

**Geometric aspects of partial differential equations: proceedings of a Minisymposium on Spectral Invariants, Heat Equation Approach, September 18-19, 1998, Roskilde, Denmark**

Booss-Bavnbek, B. (Redaktør) & Wojciechowski, K. P. (Redaktør), 1999, Providence, R.I.: American Mathematical Society . (Contemporary Mathematics; Nr. 242).

**Symplectic functional analysis and spectral invariants**

Booss-Bavnbek, B. & Furutani, K., 1999, *Geometric aspects of partial differential equations: proceedings of a Minisymposium on Spectral Invariants, Heat Equation Approach, September 18-19, 1998, Roskilde, Denmark*. Booss-Bavnbek, B. & Wojciechowski, K. (red.). Providence, R.I.: American Mathematical Society, s. 53-83 (Contemporary Mathematics; Nr. 242).

**Symplectic functional analysis and spectral invariants**

Booss-Bavnbek, B., 1999, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 361).

**Determinants, manifolds with boundary and dirac operators**

Booss-Bavnbek, B., Morchio, G., Scott, S. & Wojciechowski, K. P., 1998, *Clifford algebras and their applications in mathematical physics*. Dietrich, V. (red.). Dordrecht: Kluwer Academic Publishers, s. 423-432

**Die Verharmlosung der Nazivergangenheit durch deutsche Mathematiker**

Booss-Bavnbek, B., 1998, I: Bulletin für Faschismus- und Weltkriegsforschung. 11, s. 50-56

**Mathematik und die Medien: Kommentar zu einem komplizierten Verhältnis**

Booss-Bavnbek, B. & Davis, P. J., 1998, I: Forum Wissenschaft. 15, 2, s. 6-9

**The Maslov index: a functional analytical definition and the spectral flow formula**

Booss-Bavnbek, B., 1998, I: Tokyo Journal of Mathematics. 21, s. 1-34

**The zeta-determinant and canonical determinant on the Grassmannian in dimension one**

Booss-Bavnbek, B., Scott, S. & Wojciechowski, K. P., 1998, I: Letters in Mathematical Physics. 45, s. 353-362

**Grassmannian and chiral anomaly**

Booss-Bavnbek, B., 1997, I: Journal of Geometry and Physics. 22, s. 219-244

**Anmeldelse af Ole Skovsmose: Towards a philosophy of critical mathematics education. 1996.**

Booss-Bavnbek, B., 1996, I: ZDM - Zentralblatt für Didaktik der Mathematik. 28, 3, s. 76-80

**Go on with environmental modeling?**

Booss-Bavnbek, B., 1996, I: SIAM News - Society for Industrial and Applied Mathematics. 29, 9, s. 6-7 + 14

**Grassmannian and boundary contribution to the z-determinant**

Wojciechowski, K. P., Scott, S. G., Marchio, G. & Booss-Bavnbek, B., 1996, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 320).

**Grassmannian and chiral anomaly**

Booss-Bavnbek, B. & Wojciechowski, K. P., 1996, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 312).

### **Memories and memorials**

Booss-Bavnbek, B., 1995, I: Mathematical Intelligencer. 17, 2, s. 15-20

### **Mode - prediction - action: mathematics induced changes in science, technology and public thinking**

Booss-Bavnbek, B., 1995, I: Res Humanae. 1, s. 113-172

### **The Maslov index: a functional analytical definition and the spectral flow formula**

Booss-Bavnbek, B. & Furutani, K., 1995, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 305).

### **Perspectives on Teichmüller and the Jahresbericht**

Booss-Bavnbek, B., 1994, 2 udg. Roskilde: Roskilde Universitet. 76 s. (Tekster fra IMFUFA; Nr. 275).

### **Dirac operators and manifolds with boundary**

Booss-Bavnbek, B. & Wojciechowski, K. P., 1993, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 248).

### **Partitioned manifolds and invariants in dimensions 2, 3, and 4**

Booss-Bavnbek, B. & Wojciechowski, K. P., 1993, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 260).

### **Perspectives on Teichmüller and the jahresbericht addendum to Schappacher, Scholz, et al.**

Booss-Bavnbek, B., 1993, Roskilde: Roskilde Universitet. (Tekster fra IMFUFA; Nr. 249).

### **Pseudo-differential projections and the topology of certain spaces of elliptic boundary value problems**

Booss-Bavnbek, B. & Wojciechowski, K. P., 1989, I: Communications in Mathematical Physics. 121, 1, s. 1-9 9 s.

### **Vurdering af matematisk teknologi**

Booss-Bavnbek, B., Plate, G., Jensen, J. H. & Bohle-Carbonell, M., 1988, Roskilde: Roskilde Universitet, 94 s.

### **Desuspension of splitting elliptic symbols - addendum**

Booss-Bavnbek, B. & Wojciechowski, K. P., jan. 1987, I: Annals of Global Analysis and Geometry. 5, 1, s. 87 1 s.

### **Machbarkeit nichtbeherrschbarer technik durch fortschritte in der erkennbarkeit der natur**

Booss-Bavnbek, B. & Bohle-Carbonell, M., 1987, roskilde: Roskilde Universitet, 31 s.

### **Pseudo-differential projections and the topology of certain spaces of elliptic boundary value problems**

Booss-Bavnbek, B. & Wojciechowski, K. P., 1987, Roskilde: Roskilde Universitet, 17 s.

### **The calderón projektor for operators with splitting elliptic symbols**

Booss-Bavnbek, B. & Wojciechowski, K. P., 1987, Roskilde: Roskilde Universitet, 23 s.

### **Desuspension of splitting elliptic symbols 11**

Booss-Bavnbek, B. & Wojciechowski, K. P., 1985, Roskilde: Roskilde Universitet, s. 63.

### **Von Mathematik und Krieg: über die Bedeutung von Rüstung und militärischen Anforderungen für die Entwicklung der Mathematik in Geschichte und Gegenwart**

Booss-Bavnbek, B. & Høyrup, J., 1984, Marburg. (Schriftenreihe Wissenschaft und Frieden ; Nr. 1984:1). (Tekster fra IMFUFA; Nr. 64).

## **Aktiviteter**

Discrete Mathematics and Biology: the legacy of Andreas Dress

Booss-Bavnbek, B. (Deltager)  
26 sep. 2024 → 27 sep. 2024

**Kolloquium „History of Mathematics and the Didactic OfMathematics“**  
Booss-Bavnbek, B. (Deltager)  
23 feb. 2024

**Nankai University**  
Booss-Bavnbek, B. (Gæsteforsker)  
23 nov. 2023 → 4 dec. 2023

**Mathematisches Kolloquium Potsdam**  
Booss-Bavnbek, B. (Oplægsholder)  
25 okt. 2023

**Københavns Universitet**  
Booss-Bavnbek, B. (Gæsteforsker), Zhu, C. (Gæsteforsker) & Møller, N. M. (Gæsteforsker)  
10 aug. 2023

**34th International Workshop on Operator Theory and its Applications**  
Booss-Bavnbek, B. (Taler)  
31 jul. 2023 → 4 aug. 2023

**Institut für Mathematik Universität Potsdam Campus Golm, Haus 9**  
Booss-Bavnbek, B. (Gæsteforsker)  
21 jul. 2023

**Martin-Luther-University Halle-Wittenberg**  
Booss-Bavnbek, B. (Gæsteforsker)  
18 jul. 2023 → 20 jul. 2023

**Chaofeng Zhu**  
Booss-Bavnbek, B. (Vært)  
16 jul. 2023 → 15 aug. 2023

**29th Nordic Congress of Mathematicians**  
Booss-Bavnbek, B. (Taler)  
3 jul. 2023 → 6 jul. 2023

**IMFUFA-seminar**  
Booss-Bavnbek, B. (Oplægsholder)  
22 mar. 2023

**Differential Geometry and its Applications (Tidsskrift)**  
Booss-Bavnbek, B. (Redaktør)  
2023 → 2024

**Publicacions Matemàtiques (Tidsskrift)**  
Booss-Bavnbek, B. (Redaktør)  
2023 → 2024

**2nd Nordic Biomathematics Days**  
Ottesen, J. T. (Arrangør), Pedersen, R. K. (Arrangør), Berrig, C. (Taler), Stiehl, T. (Taler), Booss-Bavnbek, B. (Taler) & Andersen, M. (Arrangør)  
9 maj 2022 → 10 maj 2022

**Interfaces between Geometric Analysis and Mathematical Physics**

Booss-Bavnbek, B. (Deltager)

7 maj 2018 → 11 maj 2018

**Crossroads in the process of mathematization exemplified by early astronomy**

Booss-Bavnbek, B. (Oplægsholder)

11 okt. 2017

**International workshop on graphs, semigroups, and semigroup acts**

Booss-Bavnbek, B. (Deltager)

10 okt. 2017 → 13 okt. 2017

**Emeriti-Seminar Institut for Naturvidenskab og Miljø**

Booss-Bavnbek, B. (Deltager)

18 aug. 2017

**Analysis and Geometry of Graphs and Manifolds**

Booss-Bavnbek, B. (Deltager)

31 jul. 2017 → 4 aug. 2017

**Interfaces between Geometric Analysis and Mathematical Physics**

Booss-Bavnbek, B. (Arrangør)

4 jul. 2016 → 8 jul. 2016

**Udstilling på RUb "1970ernes vesttyske Berufsverbot: 'Glemt' historie. Om politisk sindelagskontrol i Forbundsrepublikken Tyskland" (in english)**

Booss-Bavnbek, B. (Arrangør), Englev, K. (Arrangør), Johannsen, T. W. (Arrangør) & Grothe, M. (Arrangør)

11 apr. 2016 → 10 maj 2016

**Temadag**

Booss-Bavnbek, B. (Arrangør)

8 apr. 2016

**Liv i en matematiseret verden?: Om at tælle, tænke og handle**

Booss-Bavnbek, B. (Foredragsholder)

24 nov. 2015 → 8 dec. 2015

**2015 annual meeting of the Deutschen Mathematiker-Vereinigung**

Booss-Bavnbek, B. (Arrangør)

22 sep. 2015 → 23 sep. 2015

**Workshop on geometric and singular analysis**

Booss-Bavnbek, B. (Deltager)

11 feb. 2015 → 13 feb. 2015

**The multi-dimensional Morse-Smale index: Analytic and Geometric Structures, Brainstorming**

Booss-Bavnbek, B. (Foredragsholder)

10 feb. 2015

**Elliptic operators on manifolds with boundary and pseudo-differential projections: Dedicated to Matthias Lesch**

Booss-Bavnbek, B. (Foredragsholder)

17 maj 2014

**Geometric Structures and Spectral Invariants**

Booss-Bavnbek, B. (Arrangør)

16 maj 2014 → 19 maj 2014

**Geometric and Singular Analysis**

Booss-Bavnbek, B. (Taler)

28 mar. 2014

**The Maslov index in symplectic Banach spaces**

Booss-Bavnbek, B. (Foredragsholder)

28 mar. 2014

**The *mathematical microscope* in bio-medicine: Organs, populations, metabolic diseases**

Booss-Bavnbek, B. (Foredragsholder)

23 okt. 2009

**International Conference on "New Developments in Spectral Theory"**

Booss-Bavnbek, B. (Deltager)

5 okt. 2009 → 6 okt. 2009

**Tokyo University of Science**

Booss-Bavnbek, B. (Gæsteforsker)

2 okt. 2009 → 8 okt. 2009

**MoNa-ansøgningen til Villum Kann Rasmussen Fund: Model-based Nanoparticle Labelling of Pancreatic  $\beta$ -cells (MoNa)**

Booss-Bavnbek, B. (Deltager)

1 apr. 2009 → 30 sep. 2009

**REx Workshop "Systems Biology of Regulated Exocytosis in Pancreatic Beta-Cells"**

Booss-Bavnbek, B. (Arrangør)

16 feb. 2009 → 19 feb. 2009

**FP7-NMP Proposal SCAN: System for Cellular Analysis by Nanotechnology**

Booss-Bavnbek, B. (Deltager)

1 dec. 2008 → 31 maj 2009

**FP7-HEALTH Proposal REx: Systems Biology of Regulated Exocytosis in Pancreatic Beta-Cells**

Booss-Bavnbek, B. (Deltager)

31 okt. 2008 → 28 feb. 2009

**Quantum Gravity - An Assessment**

Booss-Bavnbek, B. (Oplægsholder)

17 maj 2008 → 18 maj 2008

**FP7-NMP Proposal CIGN: Capturing Insulin Granule Dynamics by Nanotechnology**

Booss-Bavnbek, B. (Deltager)

1 dec. 2007 → 31 dec. 2008

**Kriegens neue Qualität**

Booss-Bavnbek, B. (Oplægsholder)

8 okt. 1999 → 9 okt. 1999

**Intersection indices in Lagrangian analysis and spectral invariants of partitioned manifolds**

Booss-Bavnbek, B. (Oplægsholder)

29 aug. 1999 → 3 sep. 1999

**Sécurité, liberté et qualité de recherche en modèles mathématiques d'environnement fondé sur les obligations courantes de l'enseignement**

Booss-Bavnbek, B. (Oplægsholder)

10 dec. 1998 → 11 dec. 1998

**Zukunftsorientierung durch simulationen und modellberechnungen?**

Booss-Bavnbek, B. (Oplægsholder)

17 okt. 1995 → 20 okt. 1995

**Elliptic boundary problems and chiral symmetry breaking**

Booss-Bavnbek, B. (Oplægsholder)

2 maj 1995

**Model-prediction-action: mathematics induced changes in science, technology and public thinking**

Booss-Bavnbek, B. (Oplægsholder)

18 feb. 1995

## Presse/medie

**3/14: Nu skal pi fejres**

Booss-Bavnbek, B.

14/03/2014

1 element af Mediedækning

**3/14: Nu skal pi fejres**

Booss-Bavnbek, B.

14/03/2014

1 element af Mediedækning

**3/14: Nu skal pi fejres: I dag er det pi-dag, og det forunderlige tal fejres over hele kloden. Pi fascinerer, fordi det har uendelig mange decimaler, og fordi det dukker op, ja, utallige steder. Her er et portræt af »den matematiske skønhed«.**

Booss-Bavnbek, B.

14/03/2014

1 Mediebidrag

**Eksotisk matematik giver nyt syn på det uforklarlige**

Booss-Bavnbek, B.

05/10/2010

1 element af Mediedækning

**Eksotisk matematik giver nyt syn på det uforklarlige**

Booss-Bavnbek, B.

18/10/2010

1 element af Mediedækning

**Et univers af uforenelige størrelser**

Booss-Bavnbek, B.

22/10/2010

1 element af Mediedækning

**Hvorfor matematikere fejrer pi-dagen året**

Booss-Bavnbek, B.

14/03/2015

1 element af Mediedækning

**Kommunister forbudt i Nazi-lærerværelset**

Booss-Bavnbek, B.

24/04/2016

1 element af Mediedækning

**Lange Haare, kurzer Verstand? Die 68er: Wie sehen Alt-68er am Beginn des Rentenalters die Rebellion von damals?**

**Was haben sie erreicht? Interview und Talkshow mit Prof. Dr. Bernhelm Booß-Bavnbek, Mathematiker, ehemaliger AStA-Vorsitzender Bonn**

Booss-Bavnbek, B.

24/11/2007

1 Mediebidrag

**Matematikere vil hjælpe diabetikere**

Booss-Bavnbek, B.

15/06/2011

1 element af Mediedækning

**Systemkritiker: Demokratiet må kunne tåle kritik**

Booss-Bavnbek, B.

16/04/2016

1 element af Mediedækning

**The number π: Interviewon π-Day 3/14\_15**

Booss-Bavnbek, B.

14/03/2015

1 Mediebidrag

Bernhelm Booß-Bavnbek [booss@ruc.dk] is an emeritus at Roskilde Universitet (Denmark). He was educated at Universität Bonn (Germany) where in 1966 he was elected as president of the AStA (the student council) on a liberal program. He demanded a normalization of the relations to West Germany's eastern neighbors, including a higher appreciation of the scientific results achieved in these countries, and a wider range of possibilities for students to comment and criticize classes and to raise questions – all achievements quite common in Departments of Mathematics, but rather rebellious in humanities, law and economics. He wrote his PhD thesis under Fritz Hirzebruch as adviser and became director of an interdisciplinary center for the mathematization of the individual sciences at Universität Bielefeld (Germany). Without success, he ran for the Federal Parliament and for the Parliament of the state North-Rhine-Westphalia on a ticket of the Communist Party, and earned a Berufsverbot – professional interdiction. In the Western part of the divided Germany that was not so seldom at that time, the 1970s. To continue his academic career he had to leave the Federal Republic of Germany. In 1977, he found a challenging position at the newly founded Roskilde Universitet where he taught and researched since then. Challenging because half of the mathematics and science teaching in Roskilde is not in courses but in student initiated problem-oriented projects, organized by group work and under the supervision of an academic teacher.

Hence, besides of the scheduled rather standard classes, he had to learn something new in each semester in 40 years. Consequently, he earned a wide view on the full range of the history of mathematics and of the use (and misuse) of mathematical models in mathematics supported technology and research fields. While giving his teaching the priority in all these years, he struggled to keep the blood rolling in the umbilical cord connecting him with some of the most advanced segments of modern mathematical research, the geometric analysis and spectral geometry of global boundary value problems for Dirac type operators. He authored several books on index theory, low-dimensional geometry and mathematical physics and edited two anthologies, which became standard in the respective fields, one on Mathematics and War, the other on Systems Theory of Regulated Exocytosis of Pancreatic  $\beta$  Cells. In The Mathematical Intelligencer, he wrote occasionally about these two topics. His most recent book is joint work with ZHU Chaofeng (Tianjin). It is on The Maslov index in symplectic Banach spaces, in press with the Memoirs of the Amer. Math. Soc.. Presently he is working on a textbook Leben in einer mathematisierten Welt? [Life in a mathematized world?] to summarize his experiences with project work and mathematics applications - in his German mother tongue.

Since his retirement, he lives and works parts of the year in Italy and in different places of Eastern Europe that are favored by him and his wife, a military historian. To him, having fun with his grandchildren is the best relaxation and the most rewarding use of time.