

Curriculum Vitae

March 2011

Personal Data:

Name / First names: Leitão / Antonio C. G.
Date of birth: 5th February 1968
Place of birth: Niteroi, Brazil
Marital status: Divorced (with 2 children)

University Education:

1986 – 1989: BSc. in Informatics at Federal University of Rio de Janeiro (Rio de Janeiro, Brazil)
Title of BSc. Thesis: The non-linear Schrödinger equation and propagation of LASER beams: Numerical experiments
1990 – 1992: MSc. in Mathematics at the Federal University of Rio de Janeiro (Rio de Janeiro, Brazil)
Title of MSc. Thesis: Solution of inconsistent linear systems using the ART algorithm (with brazilian governmental scholarship CNPq)
1993 – 1996: PhD. in Mathematics at the Goethe–Universität (Frankfurt am Main, Germany)
Title of PhD. Thesis: An iterative method for solving elliptic Cauchy Problems and the coupling with the Backus–Gilbert Method (with german governmental scholarship DAAD)

Professional Experience:

Scientific co-worker: 1990 – 1992, Dep. of Mathematics, Federal University of Rio de Janeiro (Rio de Janeiro, Brazil)
Assistant professor: Nov 1992 – Mar 1997, Department of Mathematics, Federal University of St. Catarina (Florianopolis, Brazil)
Adjunct professor: Apr 1997 – Mar 2007, Department of Mathematics, Federal University of St. Catarina (Florianopolis, Brazil)
Associate professor: since Apr 2007, Department of Mathematics, Federal University of St. Catarina (Florianopolis, Brazil)
Postdoctoral position: Aug 2000 – Mar 2001, Institut für Industriemathematik, Kepler Universität (Linz, Austria)
Postdoctoral position: Apr 2003 – Mar 2004, Radon Institute for Computational and Applied Mathematics, Austrian Academy of Sciences (Linz, Austria)
Postdoctoral position: Jan 2009 – Mar 2011, Humboldt Research Fellowship for Experienced Researchers, (Frankfurt am Main and Stuttgart, Germany)

Contact Address: Department of Mathematics, Federal University of St. Catarina, P.O. Box 476, 88040–900 Florianópolis, Brazil. Tel/Fax: +55 48 3721–9232. Email: acgleitao@gmail.com

1. Scientific Production:

1.A PhD. Thesis:

Ein Iterationsverfahren für elliptische Cauchy-Probleme und die Verknüpfung mit der Backus-Gilbert Methode, FB Mathematik, Johann Wolfgang Goethe-Universität, Frankfurt/Main, 1996.

Referees: Prof. Dr. J. Baumeister (Frankfurt/Main), Priv. Doz. F. Penzel (Darmstadt).

1.B Publications in Journals:

- 1.[†] DE CEZARO, A. AND LEITÃO, A. *Level-set approaches of L^2 -type for recovering shape and contrast in inverse problems*,
Inverse Problems in Science and Engineering (2011), submitted
2. BAUMEISTER, J.; DE CEZARO, A. AND LEITÃO, A. *Modified iterated Tikhonov methods for solving systems of nonlinear ill-posed equations*,
Inverse Problems and Imaging 5 (2011), no. 1, 1–17
3. BAUMEISTER, J.; KALTENBACHER, B. AND LEITÃO, A. *On Levenberg-Marquardt Kaczmarz methods for regularizing systems of nonlinear ill-posed equations*,
Inverse Problems and Imaging 4 (2010), no. 3, 335–350
4. VAN DEN DOEL, K.; ASCHER, U. AND LEITÃO, A. *Multiple level sets for piecewise constant surface reconstruction in highly ill-posed problems*,
Journal of Scientific Computing 43 (2010), no. 1, 44–66
5. EGGER, H. AND LEITÃO, A. *Efficient stable solutions of nonlinear elliptic Cauchy problems with piecewise constant solutions*,
Advances in Applied Mathematics and Mechanics 1 (2009), no. 6, 729–749
6. EGGER, H. AND LEITÃO, A. *Nonlinear regularization methods for ill-posed problems with piecewise constant or strongly varying solutions*,
Inverse Problems 25 (2009), no. 11, 115014
7. BLEYER, I. AND LEITÃO, A. *On Tikhonov functionals penalized by Bregman distances*,
CUBO, A Mathematical Journal 11 (2009), no. 5, 99–115
8. HALTMAIER, M.; LEITÃO, A. AND RESMERITA, E. *On regularization methods of EM-Kaczmarz type*,
Inverse Problems 25 (2009), no. 7, 075008
9. DE CEZARO, A.; LEITÃO, A. AND TAI, X.C. *On multiple level-set regularization methods for inverse problems*,
Inverse Problems 25 (2009), no. 3, 035004
10. LEITÃO, A. AND ZUBELLI, J.P. *Iterative regularization methods for a discrete inverse problem in MRI*,
CUBO, A Mathematical Journal 10 (2008), no. 2, 137–146

[†]Manuscript currently in press.

11. DE CEZARO, A.; HALTMAIER, M.; LEITÃO, A. AND SCHERZER, O. *On Steepest-Descent-Kaczmarz methods for regularizing systems of nonlinear ill-posed equations*, **Applied Mathematics and Computation** 202 (2008), no. 2, 596–607
12. LEITÃO, A. AND MARQUES ALVES, M. *On level set type methods for elliptic Cauchy problems*, **Inverse Problems** 23 (2007), no. 5, 2207–2222
13. KINDERMANN, S. AND LEITÃO, A. *Regularization by dynamic programming*, **Journal of Inverse and Ill-Posed Problems** 15 (2007), no. 4, 295–310
14. KINDERMANN, S. AND LEITÃO, A. *On regularization methods based on dynamic programming techniques*, **Applicable Analysis** 86 (2007), no. 5, 611–632
15. HALTMAIER, M.; KOWAR, R.; LEITÃO, A. AND SCHERZER, O. *Kaczmarz methods for regularizing nonlinear ill-posed equations II: Applications*, **Inverse Problems and Imaging** 1 (2007), no. 3, 507–523
16. HALTMAIER, M.; LEITÃO, A. AND SCHERZER, O. *Kaczmarz methods for regularizing nonlinear ill-posed equations I: Convergence Analysis*, **Inverse Problems and Imaging** 1 (2007), no. 2, 289–298
17. BAUMEISTER, J.; LEITÃO, A. AND SILVA, G.N. *On the value function for nonautonomous optimal control problems with infinite horizon*, **Systems and Control Letters** 56 (2007), no. 3, 188–196
18. LEITÃO, A. *Semiconductors and DtN Maps*, **Computational and Applied Mathematics** 25 (2006), no. 2–3, 187–203
19. LEITÃO, A. AND SCHERZER, O. *Corrigendum: On the relation between constraint regularization, level sets and shape optimization 2003 Inverse Problems 19 L1-L11*, **Inverse Problems** 22 (2006), no. 4, 1507
20. LEITÃO, A.; MARKOWICH, P.A. AND ZUBELLI, J.P. *On inverse doping profile problems for the stationary voltage-current map*, **Inverse Problems** 22 (2006), no. 3, 1071–1088
21. KINDERMANN, S. AND LEITÃO, A. *On regularization methods for inverse problems of dynamic type*, **Numerical Functional Analysis and Optimization** 27 (2006), no. 2, 139–160
22. FRÜHAUF, F.; SCHERZER, O. AND LEITÃO, A. *Analysis of regularization methods for the solution of ill-posed problems involving discontinuous operators*, **SIAM J. on Numerical Analysis** 43 (2005), no. 2, 767–786
23. BURGER, M.; ENGL, H.W.; LEITÃO, A. AND MARKOWICH, P.A. *On inverse problems for semiconductor equations*, **Milan Journal of Mathematics** 72 (2004), no. 1, 273–314

24. BAUMEISTER, J. AND LEITÃO, A. *Optimal exploitation of renewable resource stocks: necessary conditions*,
Optimal Control Applications and Methods 25 (2004), no. 1, 19–50
25. KÜGLER, P. AND LEITÃO, A. *Mean value iterations for nonlinear elliptic Cauchy problems*,
Numerische Mathematik 96 (2003), no. 2, 269–293
26. LEITÃO, A. AND SCHERZER, O. *On the Relation between Constraint Regularization, Level Sets, and Shape Optimization*,
Inverse Problems 19 (2003), no. 1, L1–L11
27. LEITÃO, A. *Mean value methods for solving the heat equation backwards in time*,
Matemática Contemporânea 23 (2002), 35–47
28. ENGL, H.W. AND LEITÃO, A. *A Mann iterative regularization method for elliptic Cauchy problems*,
Numerical Functional Analysis and Optimization 22 (2001), no. 7–8, 861–884
29. BAUMEISTER, J. AND LEITÃO, A. *Iterative methods for ill-posed problems modeled by PDE's*,
Journal of Inverse and Ill-Posed Problems 9 (2001), no. 1, 13–29
30. LEITÃO, A. *On inverse problems modeled by PDE's*,
Matemática Contemporânea 18 (2000), 195–207
31. LEITÃO, A. *An iterative method for solving elliptic Cauchy problems*,
Numerical Functional Analysis and Optimization 21 (2000), no. 5–6, 715–742
32. LEITÃO, A. *Applications of the Backus–Gilbert method to linear and some non linear equations*,
Inverse Problems 14 (1998), no. 5, 1285–1297

1.C Books and Book Chapters:

1. BAUMEISTER, J. AND LEITÃO, A. *Introduction to Control Theory and Dynamic Programming* (portuguese)
Euclides Project, **IMPA Mathematical Publications**, Rio de Janeiro, 2008, xiii+399 pp., [ISBN 978-85-244-0271-5]
2. LEITÃO, A.; MARKOWICH, P.A. AND ZUBELLI, J.P. *Inverse Problems for Semiconductors: Models and Methods*,
In: *Transport Phenomena and Kinetic Theory*, Ed.: C. Cercignani and E. Gabetta, **Birkhäuser**, Boston, 2007, 117–149, [ISBN 0-8176-4489-X]
3. BAUMEISTER, J. AND LEITÃO, A. *Topics in inverse problems*
25th Brazilian Mathematics Colloquium, **IMPA Mathematical Publications**, Rio de Janeiro, 2005, viii+193 pp., [ISBN 85-244-0224-5]

4. LEITÃO, A. *Variational Calculus and Optimal Control* (portuguese)
23rd Brazilian Mathematics Colloquium, **IMPA Mathematical Publications**, Rio de Janeiro, 2001, ii+111 pp., [ISBN 85-244-0171-0]

1.D Published Contributions to Academic Conferences:

1. LEITÃO, A. AND MARQUES ALVES, M. *Multiple level-sets for elliptic Cauchy problems in three dimensional domains*,
Journal of Physics: Conference Series, 255 (2010), 012005
2. DECEZARO, A.; LEITÃO, A. AND TAI, X.C. *On level-set type methods for recovering piecewise constant solutions of ill-posed problems*,
Lecture Notes in Computer Sciences, 5567 (2009), 50–62
3. ANZENGRUBER, S.; BAUER, F.; LEITÃO, A. AND RAMLAU, R. *New algorithms for parallel MRI*,
Journal of Physics: Conference Series, 135 (2008), 012009
4. BAUMEISTER, J.; LEITÃO, A. AND SILVA, G.N. *Optimal control problems with infinite horizon whose control laws contain measures*,
Nonlinear dynamics, chaos, control, and their applications to engineering sciences, Vol. 4 (2002), 228–250
5. LEITÃO, A. *On optimal control problems with infinite horizon*,
Nonlinear dynamics, chaos, control, and their applications to engineering sciences, Vol. 4 (2002), 251–263
6. BAUMEISTER, J. AND LEITÃO, A. *Necessary conditions for an impulsive optimal control problem*,
Proceedings of european control conference, Porto, September 2001, 912–916

2. Talks in Workshops and Conferences:

1. *A level-set regularization method for crack detection*,
IPCA10 Inverse Problems: Computation and Applications, CIRM, Luminy (France), May 2010
2. *A regularization method based on level-sets for the problem of crack detection from electrical measurements*,
WIPA2010 Inverse problems and applications, Universidad Técnica Federico Santa Maria, Valparaiso (Chile), January 2010
3. *On regularization methods of EM-Kaczmarz type*,
3rd Latin american congress of mathematicians, USACH, Santiago (Chile), September 2009
4. *On multiple levelset type regularization methods*,
Chemnitz-RICAM-Symposium on inverse problems, Radon Institut, Linz (Austria), July 2009

5. *Multiple levelset methods for EIT problems*,
Workshop on electromagnetic inverse problems, University of Manchester, Manchester (UK), June 2009
6. *A levelset type method for recovering piecewise constant solutions of inverse problems*,
SSVM 2009, Voss (Norway), June 2009
7. *Semiconductor equations: Analysis and numerical solutions*,
3rd Brazilian school of PDE's, USP, Sao Paulo (Brazil), May 2009
8. *On multiple level-set regularization methods for inverse problems*,
3rd International conference on scientific computing and PDE's, Hong Kong Baptist University, Hong Kong (China), December 2008
9. *On multiple level-set methods for inverse problems*,
2nd Symposium on scattering and spectral theory, Serrambi (Brazil), August 2008
10. *Recent developments in level-set methods*,
LNCC Meeting, LNCC, Petrópolis (Brazil), August 2008
11. *Landweber-Kaczmarz methods for regularizing systems of nonlinear ill-posed equations*,
ICIAM 2007, ETH, Zürich (Switzerland), July 2007
12. *Dynamic inverse problems*, (mini-symposium organizer)
Speakers: Alfred K. Louis, Hanna K. Pikkarainen, Stefan Kindermann, Philipp Kügler
Applied inverse problems, Vancouver (Canada), June 2007
13. *Identification of a discontinuous coefficient in semiconductor equations*,
Applied inverse problems, Vancouver (Canada), June 2007
14. *On Landweber-Kaczmarz type methods*,
Symposium on inverse problems honoring Alberto Calderón, IMPA, Rio de Janeiro (Brazil), January 2007
15. *Semiconductors and DtN Maps*, (short-course)
Symposium on inverse problems honoring Alberto Calderón, IMPA, Rio de Janeiro (Brazil), January 2007
16. *Regularization of systems of nonlinear ill-posed equations: Landweber-Kaczmarz methods*,
Chemnitz symposium on inverse problems, TU-Chemnitz, Chemnitz (Germany), September 2006
17. *Level set type methods for inverse doping problems*,
Variational and PDE level set methods, Universitätszentrum Obergurgl, Obergurgl (Austria), September 2006
18. *On inverse doping for the stationary voltage-current map*,
Nonlinear PDEs: Homogenization and kinetic equations, Kreiskyforum, Vienna (Austria), June 2006
19. *Semiconductors and DtN Maps*,
A.P. Calderón – Seminar on inverse problems and applications, LNCC, Petrópolis (Brazil), March 2006

20. *Level set methods for inverse doping problems*,
Workshop on Galerkin discontinuous methods and multiscale finite element methods, UFSC, Florianópolis (Brazil), February 2006
21. *Level set methods for inverse doping profile problems related to the voltage-current map*,
Workshop on level set methods for direct and inverse problems, RICAM, Linz (Austria), September 2005
22. *Topics in inverse problems*, (short-course)
25th Brazilian mathematics colloquium, IMPA, Rio de Janeiro (Brazil), July 2005
23. *Regularization methods based on dynamic programming techniques*,
IX Workshop on partial differential equations, IMPA, Rio de Janeiro (Brazil), July 2005
24. *Regularization methods for dynamic inverse problems*,
Applied inverse problems, Cirencester (UK), June 2005
25. *Topics in control theory*, (short-course; with G.N. Silva)
2nd Biannual meeting of the brazilian mathematical society, UFBA, Salvador (Brazil), October 2004
(Lecture Notes available – portuguese, ii+95 pp.)
26. *On the relation between constraint regularization and level-set methods*,
Analytic and geometric methods in inverse problems, HUT, Helsinki (Finland), August 2003
27. *On the value function for optimal control problems with infinite horizon*,
24th Brazilian mathematics colloquium, IMPA, Rio de Janeiro (Brazil), July 2003
28. *Inverse Problems for Semiconductor Devices*,
24th Brazilian mathematics colloquium, IMPA, Rio de Janeiro (Brazil), July 2003
29. *Analysis of Level-Set Methods*,
VIII Workshop on partial differential equations, IMPA, Rio de Janeiro (Brazil), July 2003
30. *Topics in dynamic programming*, (short-course)
1st Biannual meeting of the brazilian mathematical society, UFMG, Belo Horizonte (Brazil), October 2002
(Lecture Notes available – portuguese, 32 pp.)
31. *Mean value iterations for nonlinear elliptic Cauchy problems*,
Computational methods for inverse problems, Strobl (Austria), August 2002
32. *Necessary conditions for an impulsive optimal control problem*, (with J. Baumeister)
European control conference (ECC 2001), Porto (Portugal), September 2001
33. *Optimal exploitation of renewable resource stocks: necessary conditions*,
23rd Brazilian mathematics colloquium, IMPA, Rio de Janeiro (Brazil), July 2001

34. *Variational calculus and optimal control*, (short-course)
23rd Brazilian mathematics colloquium, IMPA, Rio de Janeiro (Brazil), July 2001
35. *Mean value methods for parabolic ill-posed problems*,
VII Workshop on partial differential equations, IMPA, Rio de Janeiro (Brazil), July 2001
36. *Regularization properties of an iterative method for elliptic Cauchy problems*,
Applied inverse problems, Montecatini (Italy), June 2001
37. *On the value function for optimal control problems with infinite horizon*,
GAMM 2001, ETH, Zürich (Switzerland), February 2001
38. *Topics in control theory*, (short-course)
XXII Congress of the Brazilian society for computational and applied mathematics, Santos (Brazil), September 1999
(Lecture Notes available – portuguese, iv+83 pp.)
39. *On inverse problems modeled by PDE's*,
VI Workshop on partial differential equations, IMPA, Rio de Janeiro (Brazil), July 1999
40. *On necessary and sufficient convex conditions for stabilization of control systems*,
(with I. Ghiggi)
51º Seminário brasileiro de análise, LNCC, Petrópolis (Brazil), November 1998
41. *On a linear operator related to the solution of elliptic Cauchy problems*,
ICM 1998, TU-Berlin, Berlin (Germany), August 1998
42. *Application of the Backus–Gilbert method to a particular class of non linear equations*,
48º Seminário brasileiro de análise, UFSC, Florianópolis (Brazil), June 1997
43. *Die Backus–Gilbert Methode für ein zweidimensionales Cauchy–Problem*,
Symposium zu inversen problemen, TU-Chemnitz, Chemnitz (Germany), March 1995
44. *Solução do problema de reconstrução de imagens por projeções através do algoritmo ART*,
35º Seminário brasileiro de análise, UFRJ, Rio de Janeiro (Brazil), May 1992
45. *Um critério para acelerar a convergência do algoritmo ART*, (with E. Stockert)
IV IMPA summer workshop – Iterative methods for inverse problems, IMPA, Rio de Janeiro (Brazil), January 1992

3. Editorial Board Member:

Inverse Problems in Science and Engineering, ISSN 1741-5977 (Taylor & Francis)
International Journal of Imaging, ISSN 0974-0627 (CESER)

4. Expert Reviews for International Journals:

Applied Numerical Mathematics (Elsevier),
Annals of the Brazilian Academy of Sciences (Brazilian Academy of Sciences),

Bulletin of the Brazilian Mathematical Society (Springer),
Computational and Applied Mathematics (Brazilian Soc. of Comput. and Appl. Math.),
Computer Methods in Applied Mechanics and Engineering (Elsevier),
Computing (Springer),
Contemporary Mathematics (American Mathematical Society),
IMA Journal of Applied Mathematics (Oxford University Press),
International Journal of Computer Vision (Springer),
Inverse Problems (Institute of Physics),
Inverse Problems and Imaging (American Institute of Mathematical Sciences),
Inverse Problems in Science and Engineering (Taylor & Francis),
Journal of Inequalities and Applications (Hindawi),
Journal of Inverse and Ill-Posed Problems (de Gruyter),
Journal of Mathematical Analysis and Applications (Elsevier),
Lecture Notes in Computer Science (Springer),
Mathematical and Computer Modelling (Elsevier),
Mathematics and Computers in Simulation (Elsevier),
Numerical Algorithms (Springer),
SIAM Journal on Scientific Computing (SIAM).
Mathematical Reviews (American Mathematical Society).

5. Research Projects and Grants:

- 2010 Humboldt Research Fellowship for Experienced Researchers (extension);
Agency: Humboldt Foundation; Grant: —; Budget: Us 23 000.00;
Period: Nov 2010 – Mar 2011.
- 2010 Research Project supported by *APV Program*;
Agency: CNPq; Grant: 454177/2010-0; Budget: Us 3 000.00;
Period: Nov 2009.
- 2010 Reserach Grant (level 1C);
Agency: CNPq; Grant: 303098/2009-0; Budget: Us 32 000.00;
Period: Mar 2010 – Feb 2014.
- 2008 Humboldt Research Fellowship for Experienced Researchers;
Agency: Humboldt Foundation; Grant: —; Budget: Us 65 000.00;
Period: Jan 2009 – Aug 2010.
- 2007 Research Project supported by *EDITAL UNIVERSAL 15/2007*;
Agency: CNPq; Grant: 474593/2007-0; Budget: Us 9 000.00;
Period: Dez 2007 – Nov 2009.
- 2007 Reserach Grant (level 1D);
Agency: CNPq; Grant: 306020/2006-8; Budget: Us 40 000.00;
Period: Mar 2007 – Feb 2010.
- 2006 Reserach Project supported by *PAEX Program*;
Agency: CAPES; Grant: 0347/2006-0; Budget: Us 2 000.00;
Period: Jun 2006 – Jul 2006.
- 2005 Research Project supported by *EDITAL UNIVERSAL 19/2004*;
Agency: CNPq; Grant 478099/2004-5; Budget: Us 2 000.00;
Period: Mar 2005 – Aug 2006.

- 2004 Reserach Grant (level 2);
Agency: CNPq; Grant: 305823/2003-5; Budget: Us 20 000.00;
Period: Mar 2004 – Feb 2007.
- 2002 Reserach Project supported by *ARC Program*;
Agency: CNPq; Grant: 453481/2001-9; Budget: Us 5 000.00;
Period: Jan 2002 – Feb 2002.
- 2001 Reserach Grant (sabbatical);
Agency: CNPq; Grant: 150019/2001-7; Budget: Us 3 000.00;
Period: Mai 2001 – Jul 2001.
- 2000 Reserach Project supported by *APV Program*;
Agency: CNPq; Grant: 910023/2000-0; Budget: Us 3 000.00;
Period: Jul 2000 – Aug 2000.
- 1999 Reserach Project supported by *APV Program*;
Agency: CNPq; Grant: 910206/1998-8; Budget: Us 2 000.00;
Period: Jan 1999 – Feb 1999.

6. MSc and PhD Students:

- 2010 Fabio Margotti (MSc).
2008 Ismael Bleyer (MSc).
2006 Adriano DeCezaro (MSc).
SBMAC award for the best MSc thesis in applied mathematics of the year.
2006 Dirlei Ruscheinsky (MSc).
2005 Maicon M.Alves (MSc).
2005 Vanderlei Martins (MSc).
1998 Ilca M.Ghiggi (MSc).

7. Invited Talks, Short Courses and Research Stays:

- fev 2011 1 week visit at RICAM Institute (Austria).
Host: Dr. E. Resmerita and Dr. S. Kinderman
Guest lecture at the Institute seminar.
- fev 2011 3 days visit at Karlsruhe University (Germany). Host: Prof. Dr. A. Rieder.
- jan 2011 1 week visit at Vienna University (Austria). Host: Prof. Dr. O. Scherzer.
Guest lecture at the Isntitute seminar.
- Jul 2010 2 days visit at Karlsruhe University (Germany). Host: Prof. Dr. A. Rieder.
- Jan 2010 6 weeks visit at IMPA (Brazil). Host: Prof. Dr. A. Iussem.
- Jan 2010 1 week visit at CMM (Chile). Host: Prof. Dr. A. Osses.
- Dez 2009 1 week visit at LNCC (Brazil). Host: Prof. Dr. G. Perla.
- Nov 2009 2 weeks visit at NTU (Singapore). Host: Prof. Dr. X.C. Tai.
Guest lecture at the School of Physical and Mathematical Sciences.
- Oct 2009 1 week visit at Brookes University (Oxford).
Hosts: Dr. C. Sebu and Prof. Dr. M. Pidcock.
- Oct 2009 Guest lecture at Karlsruhe University (Germany). Host: Prof. Dr. A. Rieder.
- Sep 2009 1 Week visit at CMM (Chile). Host: Prof. Dr. A. Osses.

- Aug 2009 2 days visit at Aachen University (Germany). Host: Dr. H. Egger.
- May 2009 2 Months visit at Radon Institute (Austria). Host: Prof. Dr. B. Hofmann.
- Feb 2009 2 weeks visit at Brookes University (Oxford).
Hosts: Dr. C. Sebu and Prof. Dr. M. Pidcock.
- Nov 2008 3 weeks visit at NTU (Singapore). Host: Prof. Dr. X.C. Tai.
Guest lecture at the School of Physical and Mathematical Sciences.
- Jul 2008 1 week visit at IMPA (Brazil). Host: Prof. Dr. J. Zubelli.
- Mar 2008 1 week visit at UFPE (Brazil). Host: Prof. Dr. F. Cardoso
- Feb 2008 Guest lecture at LNCC (Brazil). Host: Prof. Dr. A. Madureira.
- Feb 2008 1 month visit at IMPA (Brazil). Host: Prof. Dr. A. Iussem.
- Jan 2008 1 week visit at Innsbruck University (Austria). Host: Prof. Dr. O. Scherzer.
- Dec 2007 Guest lecture at Aachen University (Germany). Host: Dr. H. Egger.
- Dec 2007 Guest lecture at Münster University (Germany). Host: Prof. Dr. M. Burger.
- Nov 2007 3 months visit at Radon Institute (Austria).
Hosts: Prof. Dr. H.W. Engl. and Dr. P. Kügler
- Aug 2007 1 week visit at CMLA–CNRS (France). Host: Dr. M. Nikolova.
- Jul 2007 2 weeks visit at Radon Institute (Austria). Host: Dr. S. Kinderman.
- Mar 2007 2 weeks visit at TU-Wien (Austria). Host: Prof. Dr. P.A. Markowich.
- Feb 2007 1 week visit at Innsbruck University (Austria). Host: Prof. Dr. O. Scherzer.
- Jan 2007 2 months visit at IMPA (Brazil). Host: Prof. Dr. J. Zubelli.
- Nov 2006 1 week visit at Buenos Aires University (Argentina). Host: Dr. P. de Napoli.
- Sep 2006 1 week visit at TU Chemnitz (Germany). Host: Prof. Dr. B. Hofmann.
- Sep 2006 2 weeks visit at Frankfurt University (Germany). Host: Prof. Dr. J. Baumeister.
- Sep 2006 1 week visit at Innsbruck University (Austria). Host: Prof. Dr. O. Scherzer.
- Jun 2006 1 week visit at Radon Institute (Austria). Host: Dr. S. Kinderman.
- Jun 2006 1 week visit at Innsbruck University (Austria). Host: Prof. Dr. O. Scherzer.
- Jan 2006 3 months visit at IMPA (Brazil). Host: Prof. Dr. J. Zubelli.
- Sep 2005 1 week visit at Innsbruck University (Austria). Host: Prof. Dr. O. Scherzer.
- Sep 2005 1 week visit at Radon Institute (Austria). Host: Prof. Dr. H.W. Engl.
- Aug 2005 1 week visit at Washington State University (USA). Host: Prof. Dr. G. Uhlmann.
- Feb 2005 1 month visit at IMPA (Brazil). Host: Prof. Dr. J. Zubelli.
- Jan 2005 2 weeks visit at LNCC (Brazil). Host: Prof. Dr. A. Loula.
Short-course at the LNCC summer school.
- Jul 2004 1 week visit at Radon Institute (Austria). Host: Prof. Dr. H.W. Engl.
- Jul 2004 1 week visit at Innsbruck University (Austria). Host: Prof. Dr. O. Scherzer.
- Jan 2004 1 week visit at Frankfurt University (Germany). Host: Prof. Dr. J. Baumeister.
Guest lecture at the FB Mathematik.
- Jan 2004 2 weeks visit at IMPA (Brazil). Host: Prof. Dr. J. Zubelli.
Short-course at the IMPA summer school.
- Nov 2003 2 weeks visit at IPAM – UCLA (USA). Host: Prof. Dr. H.W. Engl.
- Sep 2003 1 week visit at Universidad Carlos III de Madrid (Spain). Host: Dr. O. Dorn.
Guest lecture at the mathematics–seminar.

- Aug 2002 1 week visit at Innsbruck University (Austria). Host: Prof. Dr. O. Scherzer.
- Aug 2002 1 week visit at Frankfurt University (Germany). Host: Prof. Dr. J. Baumeister.
- Jun 2002 2 weeks visit at IMPA (Brazil). Host: Prof. Dr. J. Palis.
- Dec 2001 1 month visit at IMPA (Brazil). Host: Prof. Dr. J. Palis.
- Nov 2001 2 weeks visit at MSRI (USA). Host: Prof. Dr. G. Uhlmann.
- Aug 2001 1 week visit at Porto University (Portugal). Host: Prof. Dr. F.L. Pereira.
- May 2001 3 months visit at IMPA (Brazil). Host: Prof. Dr. J. Zubelli.
- Apr 2001 3 weeks visit at Frankfurt University (Germany). Host: Prof. Dr. J. Baumeister.
- Nov 2000 1 week visit at Frankfurt University (Germany). Host: Prof. Dr. J. Baumeister.
Guest lecture at the FB Mathematik.
- Dec 1999 3 months visit at IMPA (Brazil). Host: Prof. Dr. J. Palis.
Guest lecture at the PDE–Seminar (Chair: Prof. Dr. R. Iório).
- Dec 1998 1 month visit at IMPA (Brazil). Host: Prof. Dr. R. Iório.
Guest lecture at the PDE–Seminar (Chair: Prof. Dr. R. Iório).
- Aug 1998 1 week visit at Frankfurt University (Germany). Host: Prof. Dr. J. Baumeister.
- Dec 1997 2 months visit at IMPA (Brazil). Host: Prof. Dr. J. Palis.
Guest lecture at the PDE–Seminar (Chair: Prof. Dr. R. Iório).
- Nov 1995 Guest lecture at Erlangen University (Germany). Host: Prof. Dr. A. Kirsch.