

Plamen Stefanov

Curriculum Vitae

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Education and Qualifications

- 1984 M. S. Mathematics Department, Sofia University
1988 Ph. D. Mathematics Department, Sofia University
1993 Dr. Sci. Sofia (this degree has no US equivalent)

Positions

- 2006– Professor, Purdue University
2000–2006 Associate Professor, Purdue University
1998–2000 Assistant Professor, East Carolina University
1996–1997 Visiting Assistant Professor, University of Washington
1994–1995 Visiting Scientist, University of British Columbia
1994 Visiting Assistant Professor, University of Washington
1993–1998 Senior Researcher, Institute of Mathematics of Bulgarian Academy of Sciences
1993–1998 Researcher, Institute of Mathematics of Bulgarian Academy of Sciences

Other Visiting Positions, Fellowships and Honors:

- 2016 fall College of Science Research award, Purdue University
2015 June Visiting Researcher, Institut Henry Poincaré, Paris
2013 Member of the Calderón Prize Committee
2012 July–August Scientific researcher, Fields Institute, Toronto
2011 June Professeur Invité, Metz University, France
2010 fall Simons Visiting Professor, MSRI, Berkeley
2010 June Professeur Invité, Université Paris 13
2001 fall Research Professor, MSRI, Berkeley
2001 June Professeur Associé, Nantes University
1998 Jan.–Oct. Visiting Professor, Federal University of Pernambuco, Recife, Brazil
1997 Sep. & Nov. Visiting Professor, Fields Institute, Toronto, Canada
1996–2001 Associate member of the International Centre for Theoretical Physics,
Trieste, Italy
1995–1996 Nov.–May Research fellowship awarded by the French Government, Université
de Franche-Comté, Besançon, France
1994 spring Chercheur Associé (CNRS), Université de Franche-Comté, Besançon, France
1992–1993 Oct.–May Research fellow, University of Helsinki
1992 April–Oct. Post-doctoral fellowship, University of Bordeaux-I
1990 August Travel grant awarded by the International Mathematical Union for
participation in the International Congress of Mathematicians, Kyoto
1990 June Chercheur Associé, University of Nantes, France
1977 XIX International Olympiad of Mathematics, Belgrade, Yugoslavia,
second prize and a special prize for an original solution
1976 XVIII International Olympiad of Mathematics, Lienz, Austria, second prize

Conference Talks:

1. Conference on Partial Differential Equations, Ruse, Bulgaria, 1985.
2. C.I.M.E. Course on Microlocal Analysis and Applications, Montecatini Terme, Italy, July 3–11, 1989.
3. Conference on Partial Differential Equations, Ruse, Bulgaria, August 1989.
4. Conference on Integral Equations and Inverse Problems, Varna, Bulgaria, Sept. 18–23, 1989.
5. R.C.P. 264 Meeting on Inverse Problems, Montpellier, France, Nov. 27 – Dec. 01, 1989.
6. Conference on Inverse Problems in Engineering Sciences, Osaka, Japan, August 19–20, 1990.
7. IAMP 91 — 10th International Congress on Mathematical Physics, Leipzig, Germany, July 30 – August 9, 1991.
8. R.C.P.264 Meeting on Inverse Problems, Montpellier, France, Nov. 28 – Dec. 03, 1991.
9. The Lapland Conference on Inverse Problems, Finland, June 14–20, 1992.
10. Fourth Colloquium on Differential Equations, Plovdiv, Bulgaria, August 1993.
11. Conference on Electric Impedance Tomography, Seattle, July 23–27, 1995.
12. Journées Semi-Classiques 5, Université de Paris-Nord, France, Feb. 1996.
13. Microlocal Month, University of Pisa, Italy, June 1996.
14. Special Session “Inverse Problems: Theory and Practice”, Corvallis, Oregon, April 1997.
15. Program in Microlocal Methods in Geometric Analysis and Mathematical Physics, Workshop on Microlocal Analysis and Mathematical Physics, Fields Institute, Toronto, Canada, Sept. 8–14, 1997
16. Workshop on Microlocal Methods in Geometric Analysis, Fields Institute, Toronto, Canada, Oct. 27–Nov. 2, 1997.
17. Conference on Microlocal Methods in Inverse Problems, Kyoto University, Kyoto, Japan, June 29–July 3, 1998.
18. AMS Special Session, Salt Lake City, Sep. 24–26, 1999.
19. Workshop, Program on Scattering Theory, Erwin Schrödinger Institute, Vienna, May 2001.
20. PDE conference, Plestin–les–Grèves, France, June 5–8, 2001.
21. Workshop on Inverse Problems at the MSRI, Nov. 2001.
22. Workshop on Inverse Problems and Applications, Cortona, Italy, June 3–9 2002.
23. AMS-UMI meeting, Pisa, Italy, June 12–16 2002.
24. Scattering and Inverse Scattering conference, Banff, Canada, March 2003.
25. MSRI workshop on Semiclassical Analysis, May 2003.
26. Symposium on Scattering Theory, Recife, Brazil, August 2003.
27. Conference “Perspectives in Inverse Problems”, Helsinki, May 2004.
28. AMS Special Session on Inverse Problems, Vanderbilt University, October 2004.
29. AMS Special Session on Geometric Partial Differential Equations, Evanston, October 2004.

30. AMS Special Session on Mathematical Theory of Inverse Problems and Applications, Atlanta, January 2005.
31. Conference: “Eigenfunctions of the Laplacian”, UW Seattle, July 27–28, 2005.
32. AMS Special Session on Scattering and Spectral Problems in Geometry, Lincoln, NE, October 21–23, 2005.
33. Conference: Analysis and Probability in Quantum Physics, Chile, July–Aug. 2006.
34. Conference on Inverse Problems in Sapporo, Japan, July 2006.
35. Workshop at Tsukuba University, Japan, July 2006.
36. Workshop on Inverse Problems, Banff, Aug. 2006.
37. AMS Special Session on Scattering Theory and Wave Propagation, Fayetteville, AR, Nov. 3-4, 2006.
38. AMS session at the National AMS meeting in New Orleans, January 2007.
39. Conference on Inverse Problems honoring Alberto Calderón, Rio de Janeiro, January, 2007.
40. Analyse microlocale et harmonique pur les problèmes inverses, C.I.R.M, Luminy, France, March 26–30, 2007.
41. Hyperbolic Operators and Scattering, Bordeaux, France, May 21–24, 2007.
42. Summer School on Inverse Problems and Radiative Transfer, Seattle, June 18–22, 2007.
43. First International Congress of IPIA, June 2007, plenary talk.
44. First International Congress of IPIA, June 2007, mini session talk.
45. Special AMS session: Wave Propagation from Mathematical and Numerical Viewpoints, De Paul University, Oct. 2007.
46. Summer School on Inverse Problems and Radiative Transfer, and a Workshop, UC Merced, June 2008.
47. Integral Geometry and Tomography, Stockholm University, August 12–15, 2008.
48. Second Symposium on Scattering and Spectral Theory, Serrambi, Brazil, August 18–22, 2008.
49. Inverse Problems: Recent Progress and New Challenges, Banff, Nov. 2008.
50. 1st PRIMA Congress, Sidney, June 6–10, 2009.
51. Conference on Applied Inverse Problems 2009, Vienna, Austria, July 20–24, 2009.
52. Mathematical Methods in Emerging Modalities of Medical Imaging, Banff, October 25–30, 2009
53. Joint AMS-Korean Math. Soc. Meeting, Seoul, December 16–20, 2009.
54. WIPA 2010 Workshop on Inverse Problems and Applications, Valparaiso, Chile, January 18–22, 2010.
55. Inverse Problems: Theory and Applications, MSRI Workshop, November 2010.
56. Computational Wave Propagation Workshop at MSU, April 2011.
57. AIP (Applied Inverse Problems) 2011, Texas A&M, May 2011.
58. AIP (Applied Inverse Problems) 2011, Texas A&M, May 2011, (second talk).
59. Microlocal Methods in Mathematical Physics and Global Analysis, Tübingen, Germany, June 14–18, 2011.

60. Inverse Problems in Analysis and Geometry workshop, Isaac Newton Institute, Cambridge, UK, August 1–5, 2011.
61. The 2012 Joint Mathematics Meetings in Boston, January 4–7, 2012, mini-symposium talk.
62. The 2012 Joint Mathematics Meetings in Boston, January 4–7, 2012, second mini-symposium talk.
63. Workshop on Geometric Analysis on Euclidean and Homogeneous Spaces at Tufts University, January 8–9, 2012.
64. PASI-CIPPDE 2012 — Pan-American Advanced Studies Institute — Inverse Problems and PDE Control, Santiago, Chile, 16–27 January 2012.
65. 6th International Conference “Inverse Problems”, Antalya, Turkey, May 2012.
66. Semiclassical and multiscale aspects of wave propagation, Heraklion, Greece, May 28 – June 2, 2012.
67. 2012 SIAM Annual Meeting, Minneapolis, Minnesota, July 2012, mini-symposium talk.
68. International Conference on Inverse Problems and Applications in Honor of Gunther Uhlmann’s 60th Birthday, Zhejiang University, Hangzhou, China, 17–21 September, 2012.
69. Coupled Physics Inverse Problems Conference, Santiago, Chile, 3–5 January 2013.
70. 2nd PRIMA Congress, talk at the section of Inverse Problems, Shanghai, China, June 2013.
71. Applied Inverse Problems Conference, Daejeon, Korea, July 2013.
72. Applied Inverse Problems Conference, Daejeon, Korea, July 2013 (second talk).
73. SIAM Annual Meeting, San Diego, July 8-12, 2013, mini-symposium talk.
74. Erwin Schrödinger Institute, May 2014.
75. Inverse Problems Conference, Luminy France, May 2014.
76. “Three days on analysis and PDEs” conference, Madrid, June 2014.
77. AIP-2015 (Applied Inverse Problems 2015), Helsinki, May 2015
78. AIP-2015 (Applied Inverse Problems 2015), Helsinki, May 2015 (second talk)
79. Geometric Inverse Problems conference, IHP, Paris, June 2015.
80. Eighth International Conference “Inverse Problems: Modeling and Simulation”. Turkey, May 2016.
81. 100 Years of Radon Transform conference, Linz, March 2017.
82. Midwestern Microlocal Meeting, Purdue University, May 2017.
83. Second International Conference “Mathematics Days in Sofia”, Bulgaria, July 2017, plenary talk.
84. The Third Symposium on Scattering and Spectral Theory, Florianapolis, Brazil, July 2017.
85. AMS Sectional Meeting, Orlando, September 2017.
86. ORAM-8 (Ohio River Analysis Meeting), Lexington, March 2018.

Summer school mini-courses given

- Summer School on Inverse Problems, UW Seattle, Aug. 1–5, 2005.
- Mini-course for graduate students at IMPA, Rio de Janeiro, January, 2007.

- Summer Grad Workshop at MSRI on Inverse Problems, July 20–31, 2009, a 5 lecture mini-course.
- Thematic Program on Inverse Problems and Imaging, The Field Institute, Toronto, July-August 2012, two mini courses.
- Mini-course on Microlocal Methods in Inverse Problems, UW Seattle, July 2013.

Seminar and Colloquium talks

1. University of Nantes, France, May 1990.
2. University of Paris-Nord, France, June 1990.
3. University of Bordeaux-I, France, December, 1991, May 1992.
4. Université de Franche-Comté, Besançon, France, October 1992.
5. I.N.R.I.A., France, October 1992.
6. University of Helsinki, Finland, October, November 1992, January 1993.
7. University of Delaware, March 1993.
8. Kansas State University, March 1993.
9. Wichita State University, March 1993.
10. University of Nantes, France, Jan. 1994.
11. Université de Franche-Comté, Besançon, France, Feb. 1994.
12. Séminaire Problèmes spectraux en physique mathématique, Paris XIII/Paris XI/ l'E.N.S., Feb. 1994.
13. Institut Fourier, Grenoble, France, Feb. 1994.
14. Seminar on Multi-Dimensional Inverse Scattering, University of Washington, Seattle, April 1994.
15. Seminar on Inverse Scattering, University of British Columbia, Vancouver, Canada, April 1994.
16. Seminar on Partial Differential Equations, University of British Columbia, Vancouver, Canada, October 1994.
17. Université de Franche-Comté, Besançon, France, Dec. 1995.
18. University of Bordeaux-I, France, Feb. 1996.
19. University of Nantes, France, Feb. 1996.
20. UFPE, Recife, Brazil, Aug. 1996.
21. Differential Geometry/PDE Seminar, University of Washington, Seattle, Nov. 1996.
22. Differential Geometry/PDE Seminar, University of Washington, Seattle, Nov. 1997.
23. Seminar on PDE, Osaka University, Osaka, Japan, June 1998.
24. UFPE, Recife, Brazil, Sep. 1998.
25. PDE seminar, Purdue University, Febr. and March, 2001.
26. PDE seminar, University of Bordeaux, June 2001.
27. MSRI seminar, September 2001.
28. *Colloquium talk*, Math Department, University of California at Berkeley, Nov. 2001.

29. PDE seminar, University of Bologna, Italy, June 2002.
30. PDE seminar, University of Metz, June 2002.
31. PDE seminar, University of Washington, Seattle, July 2002.
32. MSRI seminar on Semiclassical Analysis, March 2003.
33. PDE/Inverse Problems seminar, Wichita State University, Wichita, April, 2003.
34. Inverse Problems seminar at UW, Seattle, May 2003.
35. PDE Seminar, University of Kentucky, November 2003.
36. PDE seminar, Northwestern University, February, 2004.
37. *Colloquium talk*, Department of Mathematics, University of Alabama at Birmingham, April 2004.
38. PDE seminar, University of Washington, Seattle, July 2004.
39. PDE seminar, University of Washington, Seattle, Feb. and March 2007.
40. *Colloquium talk* at the Department of Applied Physics and Applied Mathematics, Columbia University, May 2007.
41. *Colloquium talk* at the Department of Department of Mathematics, University of Washington, May 2008.
42. Applied Math Seminar, Michigan State University, Oct. 2008.
43. PDE seminar, University of Rochester, April 2009.
44. *Colloquium talk*, University of Western Australia, Perth, July 2009.
45. PDE seminar, UC–Berkeley, Oct. 2009.
46. Seminar, EPFL Lausanne, May 2010.
47. Applied Math Seminar, University of Bordeaux, June 2010.
48. Universté Paris 13, June 2010.
49. Metz University, July 2010.
50. Bay Area Microlocal Seminar, Stanford University, November 2010.
51. Metz University, June 2011.
52. *Colloquium talk*, Math. Dept., Central Florida University, November 2011.
53. *Colloquium talk*, Math. Dept., UC Irvine, March 2012.
54. Seminar Talk, Ecole Normale Supérieure, Paris, France, February 2013.
55. *Colloquium talk*, Dept. of Applied Math and Applied Physics, Columbia University, April 2013.
56. PDE seminar, UC California at Berkeley, May 2013.
57. *Colloquium talk*, Rensselaer Polytechnic Institute, Nov. 4, 2013.
58. Seminar Talk, Math. Dept., University of Delaware, March 27, 2014.
59. Seminar talk, University of Cergy-Pontoise, June 2015.
60. Seminar Talk, University of Kentucky, September 2016.

61. Seminar talk, University of Michigan, April 2017.
62. Calderón–Zygmund Analysis Seminar, University of Chicago, January 2018.

Grants

- NSF grant: *Local Inverse Problems*. July 2016 – August 2019.
- NSF grant: *Inverse Problems for Wave Phenomena*. August 2013 – August 2016.
- NSF grant: *Conference on Inverse Problems* in Irvine, CA, 2012.
- NSF grant: *Scattering and Traveltime Tomography*. May 2008 – May 2013,
- NSF grant: *US – Brazil Workshop on Scattering and Spectral Theory* in Recife and Serrambi, Brazil. Feb. 2008 – Feb. 2009,
- NSF grant: *Collaborative Research: FRG: Inverse Problems in Transport Theory*. July 2006 – July 2009, CoPI.
- U.S. Civilian Research & Development Foundation (CRDF) grant: *Geometric Rigidity, Integral Geometry, and Inverse Problems*, No. 15483, Collaborative grant for US – Eurasia collaboration, CoPI. Feb. 2007 – Feb. 2010, .
- NSF grant: *Inverse Anisotropic Problems and Resonances*. May 2004 – May 2007.
- NSF grant: *Inverse Problems and Scattering Poles*. Duration: May 2000 – May 2004,
- NSF grant: *U.S.–Bulgaria Mathematics Research on Multidimensional Inverse Scattering*. 1991–94. CoPI and PI of the Bulgarian team.
- Bulgarian Research Foundation grant: *Scattering Theory and Inverse Problems*. 1991–94, PI.

Conferences I helped organize

- Member of the Organizing Committee of the *Conference on Integral Equations and Inverse Problems*, Varna, Bulgaria, September 18–23, 1989.
- Member of the Scientific Committee, *Conference on Microlocal and Harmonic Analysis in Inverse Problems* at CIRM, Luminy, France, March 2007.
- Member of the Organizing Committee, *Second Symposium on Scattering and Spectral Theory* in Recife and Serrambi, Pernambuco, Brazil, August 11–22, 2008.
- Workshop on *Inverse Transport Theory and Tomography*, Banff, May 16–21, 2010.
- *Conference on Inverse Problems in honor of Gunther Uhlmann*, UC Irvine, June 2012, main organizer.
- *The International Conference on Inverse Problems and Related Topics 2014*, Taiwan, December 15–19, 2014, member of the scientific committee.
- *Workshop on Inverse Problems in Scattering and Imaging*, Purdue, April 2016.
- Special session at the *100 Years of the Radon Transform* conference in Linz, Austria in March 2017.

Graduate students supervised:

- An Fu, now holding a teaching position in Beijing.
- Bela Frigyik (joint student with Gunther Uhlmann), now faculty at the University of Pécs, Hungary.

- Venky Krishnan (joint student with Gunther Uhlmann), now faculty at Tata Institute of Fundamental Research, India.
- Sean Holman (joint student with Gunther Uhlmann), now faculty at the University of Manchester, UK.
- Carlos Montalto, now a faculty at the Universidad de Costa Rica.
- Andrew Homan, now working at Matrix Research.
- Peter Caday, UW (joint student with Gunther Uhlmann), now a post-doc at Rice University.
- Siamak Rabieniaharatbar, current student.
- Paul Kepley, current joint student with Marteen De Hoop.
- Yang Zhang, current student.
- Chase Mathison, current student.

Post-Docs supervised:

- Bela Frigyik, now assistant professor at the University of Pécs, Hungary.
- Ha Pham.
- Yang Yang, now assistant professor at MSU.

Editor

- Inverse Problems and Imaging, since 2015.
- Journal of Inverse and Ill-Posed Problems, since 2017.

Service

- “Problem of the Week” coordinator, Fall 2004–2007.
- Member of the Undergraduate Task Force at the CoS, 2005–2006.
- Member of the Undergraduate Committee, 2005–2007.
- Member of the WEB Committee, 2010(?)–current.
- Member of the Promotions Committee, 2006–07, 2011–12, 2012–13.
- Member of the Graduate Committee, Aug. 2007 - May 2008.
- Faculty Council, Fall 2008 - spring 2011.
- Chair of the Advanced Services Committee, Spring 2011–2014 and 2015–present
- Member of the Personnel Committee, 2016–17.
- Grade Appeal Committee, 2016–17.
- Member of the Personnel Committee 2016–2017
- Chair of the Promotions Sub-committee 2017–2018

- Reviewer for Zentralblatt für Mathematik, Mathematical Reviews, Bulgarian Research Foundation, professional journals, NSF, including an NSF panelist, The Finish Research Foundation, textbooks, external reviewer of the core Analysis courses at the Wichita State University, external referee/reviewer of several tenure cases and a promotion to full professor (US), a promotion case (Australia), a habilitation (France), promotion to full professor (Finland), evaluator of the candidates for a chair of the Math Department of the City University of Honk Kong.

List of Publications of Plamen Stefanov

- [1] P. Stefanov, Existence of the wave operators for dissipative systems, *Compt. Rend. Acad. Bulg. Sci.* **37**(6)(1984), 729–731.
- [2] P. Stefanov, Existence and completeness of the wave operators for dissipative systems, *Serdica* **13**(1987), 126–132.
- [3] V. Georgiev and P. Stefanov, Existence of the scattering operator for dissipative hyperbolic systems with variable multiplicity (with V. Georgiev). In *Differential equations and applications, I, II* (Russian) (Ruse, 1985), pages 659–662. ‘Angel Kanchev’ Tech. Univ., Ruse, 1987.
- [4] P. Stefanov, Existence and completeness of wave operators for Maxwell equations in inhomogeneous media, *Compt. Rend. Acad. Bulg. Sci.* **38**(5)(1985), 547–550.
- [5] V. Georgiev and P. Stefanov, Existence of the scattering operator for dissipative hyperbolic systems with variable multiplicities, *J. Operator Theory* **19**(1988), 217–241.
- [6] P. Stefanov, Spectral and scattering theory for the linear Boltzmann equation in exterior domain, *Compt. Rend. Acad. Bulg. Sci.* **40**(1)(1987), 21–23.
- [7] P. Stefanov, Spectral and scattering theory for the linear Boltzmann equation in exterior domain, *Math. Nachr.* **137**(1988), 63–77.
- [8] P. Stefanov, Inverse scattering problem for the wave equation with time dependent potential, *Compt. Rend. Acad. Bulg. Sci.* **40**(11)(1987), 29–30.
- [9] P. Stefanov, Inverse scattering problem for the wave equation with time dependent potential, *J. Math. Anal. Appl.* **140**(1989), 351–362.
- [10] P. Stefanov, Unicité du problème inverse de diffusion pour l’équation des ondes avec un potentiel dépendant du temps, *C. R. Acad. Sci. Paris* **305**(1987), 411–413.
- [11] P. Stefanov, Uniqueness of the inverse scattering problem for the wave equation with a potential depending on time, *Inverse Prob.* **4**(1988), 913–920.
- [12] P. Stefanov, The Newton-Marchenko equation for time-dependent potentials, *Inverse Prob.* **4**(1988), 921–928.
- [13] P. Stefanov, Uniqueness of the three-dimensional inverse scattering problem for time-dependent potentials, *Inverse Prob.* **5**(1989), L11-L14.
- [14] P. Stefanov, Uniqueness of the multi-dimensional inverse scattering problem for time-dependent potentials, *Math. Z.* **201**(1989), 541–559.
- [15] P. Stefanov, On the inverse scattering problem for a class of moving obstacles, *Compt. Rend. Acad. Bulg. Sci.* **42**(6)(1989), 25–27.
- [16] P. Stefanov, A uniqueness result for the inverse back-scattering problem, *Inverse Prob.* **6**(1990), 1055-1064.

- [17] P. Stefanov, Some inverse problems in potential scattering, in: *Integral Equations and Inverse Problems*, Editors Petkov and Lazarov, Pitman Research Notes in Mathematics Series 235, Longman Scientific & Technical, 1991.
- [18] P. Stefanov, Inverse scattering problems for the wave equation with time dependent impurities, in *Inverse Problems in Action*, series IPTI, editor P. C. Sabatier, Springer, 1990, 212–226.
- [19] P. Stefanov, Inverse scattering problem for moving obstacles, *Math. Z.* **207**(1991), 461–480.
- [20] P. Stefanov, Stability of the inverse problem in potential scattering at fixed energy, *Ann. Inst. Fourier, Grenoble* **40**(1990), 867–884.
- [21] P. Stefanov, Generic uniqueness for two inverse problems in potential scattering, *Comm. P.D.E.* **17**(1992), 55–68.
- [22] A. G. Ramm and P. Stefanov, A three-dimensional Ambartsumian-type theorem, *Appl. Math. Lett.* **5**(5)(1992), 87–88.
- [23] A. G. Ramm and P. Stefanov, Fixed energy inverse scattering for non-compactly supported potentials, *Math. & Comput. Modeling* **18**(1993), 57–64.
- [24] P. Stefanov, Stability of the resonances under smooth perturbations of the boundary, *Asympt. Anal.* **9**(1994), 291–296.
- [25] A. G. Ramm and P. Stefanov, Fixed energy inverse scattering for exponentially decreasing potentials, in: *Lecture Notes in Physics*, vol. 422, Springer, 1993, 189–192.
- [26] P. Stefanov and G. Vodev, Distribution of resonances for the Neumann problem in linear elasticity outside a ball, *Ann. Inst. Henry Poincaré (Phys. Théorique)* **60**(3)(1994), 303–321.
- [27] A. G. Ramm and P. Stefanov, Scattering amplitude is not a finite rank kernel, *J. Inverse and Ill-Posed Prob.* **1**(4)(1993), 349–353.
- [28] P. Stefanov and G. Vodev, Distribution des résonances pour le système de l'élasticité, *Séminaire sur les Equations aux Dérivées Partielles, 1993–1994*, Exp. No. X, Ecole Polytech., Palaiseau, 1994.
- [29] P. Stefanov and G. Vodev, Distribution of resonances for the Neumann problem in linear elasticity outside a strictly convex body, *Duke Math. J.* **78**(1995), 677–714.
- [30] M. Choulli and P. Stefanov, Scattering inverse pour l'équation du transport et relations entre les opérateurs de scattering et d'albédo, *C. R. Acad. Sci. Paris* **320**(1995), 947–952.
- [31] P. Stefanov and G. Vodev, Neumann resonances in linear elasticity for an arbitrary body, *Comm. Math. Phys.* **176**(1996), 645–659.
- [32] M. Choulli and P. Stefanov, Inverse scattering and inverse boundary value problems for the linear Boltzmann equation, *Comm. P.D.E.* **21**(5&6)(1996), 763–785.
- [33] M. Chabi, M. Mokhtar-Kharroubi and P. Stefanov, Scattering theory with two L^1 spaces: application to transport equations with obstacles, *Ann. Fac. Sci. Toulouse* **6**(3)(1997), 511–523
- [34] P. Stefanov and G. Uhlmann, Inverse backscattering for the acoustic equation, *SIAM J. Math. Anal.* **28**(5)(1997), 1191–1204.

- [35] M. Choulli and P. Stefanov, Reconstruction of the coefficients of the stationary transport equation from boundary measurements, *Inverse Prob.* **12**(1996), L19–L23.
- [36] M. Choulli and P. Stefanov, An inverse boundary value problem for the stationary transport equation, *Osaka J. Math.* **36**(1)(1999), 87–104.
- [37] P. Stefanov and G. Uhlmann, Stability estimates for the hyperbolic Dirichlet to Neumann map in anisotropic media, *J. Funct. Anal.* **154**(2) (1998), 330–358.
- [38] P. Stefanov and G. Uhlmann, Rigidity for metrics with the same lengths of geodesics, *Math. Res. Lett.* **5**(1998), 83–96.
- [39] P. Stefanov, Quasimodes and resonances: sharp lower bounds, *Duke Math. J.* **99**(1999), 75–92.
- [40] P. Stefanov, Lower bound of the number of the Rayleigh resonances for arbitrary body, *Indiana Univ. Math. J.*, **49**(2)(2000), 405–426.
- [41] P. Stefanov, Resonances near the real axis imply existence of quasimodes, *C. R. Acad. Sci. Paris, Série I*, **330**(2)(2000), 105–108.
- [42] P. Stefanov, Resonance expansions and Rayleigh waves, *Math. Res. Lett.*, **8**(1–2)(2001), 105–124.
- [43] P. Stefanov, Weyl type upper bounds on the number of resonances near the real axis for trapped systems, *Journées Équations aux Dérivées Partielles, Plestin-les-grèves*, 5-8 juin 2001, Exposé No. XIII.
- [44] P. Stefanov, Estimates on the residue of the scattering amplitude, *Asympt. Anal.* **32**(3-4)(2002), 317–333.
- [45] P. Stefanov, Sharp upper bounds on the number of resonances near the real axis for trapping systems, *Amer. J. Math.* **125**(1)(2003), 183–224.
- [46] P. Stefanov and Gunther Uhlmann, Optical Tomography in two dimensions, *Methods Appl. Anal.* **10**(1)(2003), 1–9.
- [47] S. Nakamura, P. Stefanov and M. Zworski, Resonance expansions of propagators in the presence of potential barriers, *J. Funct. Anal.* **205**(2003), 180–205.
- [48] P. Stefanov, Inverse problems in Transport Theory, in *Inside Out: Inverse Problems and Applications*, MSRI publications, Vol. 47, 2003.
- [49] P. Stefanov and G. Uhlmann, Local uniqueness for the fixed energy fixed angle inverse problem in obstacle scattering, *Proc. AMS* **132**(2004), 1351–1354.
- [50] P. Stefanov and G. Uhlmann, Stability estimates for the X-ray transform of tensor fields and boundary rigidity, *Duke Math. J.* **123**(2004), 445–467.
- [51] P. Stefanov and G. Uhlmann, Stable determination of generic simple metrics from the hyperbolic Dirichlet-to-Neumann map, *IMRN* **17**(2005), 1046–1071.
- [52] P. Stefanov and G. Uhlmann, Recent progress on the boundary rigidity problem, *Electronic Research Announcements of the AMS*, 11(2005), 64–70.

- [53] P. Stefanov and G. Uhlmann, Boundary rigidity and stability for generic simple metrics, *J. Amer. Math. Soc.*, **18**(2005), 975–1003.
- [54] P. Stefanov, Approximating resonances with the Complex Absorbing Potential Method, *Commun. PDE*. **30** (2005), 1843–1862.
- [55] P. Stefanov, Sharp upper bounds on the number of scattering poles, *J. Funct. Anal.* **231**(1)(2006), 111–142.
- [56] N. Dairbekov, G. Paternain, P. Stefanov, and G. Uhlmann, The boundary rigidity problem in the presence of a magnetic field, *Advances Math.* **216**(2)(2007), 535–609.
- [57] P. Stefanov and G. Uhlmann, Boundary and Lens Rigidity, Tensor Tomography and Analytic Microlocal Analysis, in: *Algebraic Analysis of Differential Equations, Festschrift in Honor of Takahiro Kawai*, edited by T. Aoki, H. Majima, Y. Katei and N. Tose, pp. 275–293 (2008).
- [58] P. Stefanov, Microlocal approach to tensor tomography and boundary and lens rigidity, *Serdica Math. J.*, **34**(1) (2008), 67–112.
- [59] B. Frigyik, P. Stefanov and G. Uhlmann, The X-Ray transform for a generic family of curves and weights, *J. Geom. Anal.* **18**(1)(2008), 81–97.
- [60] P. Stefanov and G. Uhlmann, Integral geometry of tensor fields on a class of non-simple Riemannian manifolds, *Amer. J. Math.*, **130**(1)(2008), 239–268.
- [61] P. Stefanov, A sharp stability estimate in tensor tomography, *J. of Physics: Conference Series*, **124**(2008), 012007.
- [62] P. Stefanov and G. Uhlmann, An inverse source problem in optical molecular imaging, *Analysis & PDE* **1**(1)(2008), 115–126.
- [63] P. Stefanov and G. Uhlmann, Local lens rigidity with incomplete data for a class of non-simple Riemannian manifolds, *J. Diff. Geom.* **82**(2)(2009), 383–409.
- [64] P. Stefanov and Venky Krishnan, A support theorem for the geodesic ray transform of symmetric tensor fields, *Inverse Problems and Imaging*, **3**(3), (2009) 453–464.
- [65] P. Stefanov and G. Uhlmann, Linearizing non-linear inverse problems and an application to inverse backscattering, *J. Func. Anal.* **256**(9)(2009), 2842–2866.
- [66] P. Stefanov and A. Tamasan, Uniqueness and non-uniqueness in inverse radiative transfer, *Proc. A.M.S.* **137** (2009), 2335–2344.
- [67] P. Stefanov and G. Uhlmann, Thermoacoustic tomography with variable sound speed, *Inverse Prob.* **25**(2009), 075011.
- [68] S. McDowall, P. Stefanov and A. Tamasan, Gauge equivalence in stationary radiative transport through media with varying index of refraction, *Inverse Problems and Imaging* **4**(1)(2010) 151–167.
- [69] S. Holman and P. Stefanov, The weighted Doppler transform, *Inverse Problems and Imaging* **4**(1)(2010), 111–130.

- [70] S. McDowall, P. Stefanov and A. Tamasan, Stability of the gauge equivalent classes in stationary inverse transport, *Inverse Prob.* **26**(2010), 025006.
- [71] S. McDowall, P. Stefanov and A. Tamasan, Stability of the gauge equivalent classes in inverse stationary transport in refractive media (with Stephen McDowall and Alexandru Tamasan), *Contemporary Math.*, **559**(2011), 85–100.
- [72] P. Stefanov and G. Uhlmann, Thermoacoustic tomography arising in brain imaging, *Inverse Prob.* **27**(2011), 045004.
- [73] J. Qian, P. Stefanov, G. Uhlmann and H. Zhao, An efficient Neumann-series based algorithm for Thermoacoustic and Photoacoustic Tomography with variable sound speed, *SIAM J. Imaging Sciences*, **4**(2011), 850–883.
- [74] P. Stefanov and G. Uhlmann, The geodesic X-ray transform with caustics, *Analysis & PDE*, **5-2**(2012), 219–260.
- [75] P. Stefanov and G. Uhlmann, Recovery of a source term or a speed with one measurement and applications, *Trans. Amer. Math. Soc.* **365** (2013), 5737–5758.
- [76] M. Choulli and P. Stefanov, Stability for the multi-dimensional Borg-Levinson theorem with partial spectral data, *Commun. P.D.E.* **38**(3)(2013), 455–476.
- [77] P. Stefanov and G. Uhlmann, Multi-wave methods via ultrasound, *Inside Out II*, MSRI publications, **60**(2012), 271–324.
- [78] P. Stefanov and G. Uhlmann, Is a curved flight path in SAR better than a straight one?, *SIAM J. Appl. Math.*, **73** (4)(2013), 1596–1612.
- [79] P. Stefanov and G. Uhlmann, Instability of the linearized problem in multiwave tomography of recovery both the source and the speed, *Inverse Problems and Imaging*, **7**(4)(2013), 1367–1377.
- [80] C. Montalto and P. Stefanov, Stability of Coupled-Physics Inverse Problems with one internal measurement, *Inverse Problems* **12**(2013), 125004.
- [81] P. Stefanov, The Identification Problem for the attenuated X-ray transform, *Amer. J. Math.* **136**(5)(2014), 1215–1247.
- [82] S. Luo, J. Qian and P. Stefanov, An adjoint state method for recovery both the attenuation and the source in the attenuated X-ray transform, *SIAM J. Imaging Sciences* **7**(2)(2014), 696–715.
- [83] Ha Pham, P. Stefanov, Weyl asymptotics of the transmission eigenvalues for a constant index of refraction, *Inverse Problems and Imaging* **8**(3), 795–810, 2014.
- [84] W. Cong, Zh. Pan, R. Filkins, N. Ishaque, P. Stefanov and Ge Wang, X-ray micromodulated luminescence tomography in dual-cone geometry, *J. of Biomed. Opt.* **19**(7)(2014), 076002.
- [85] F. Monard, P. Stefanov and G. Uhlmann, The geodesic ray transform on Riemannian surfaces with conjugate points, *Commun. Math. Phys.* **337**(3)(2015), 1491–1513.
- [86] P. Stefanov, W. Cong and Ge Wang, Modulated Luminescence Tomography, *Inverse Problems and Imaging*. **9**(2)(2015), 579–589.

- [87] P. Stefanov, G. Uhlmann and A. Vasy, Inverting the local geodesic X-ray transform on tensors, 2014, to appear in *Journal d'Analyse Mathématique*.
- [88] P. Stefanov and Y. Yang, Multiwave tomography in a closed domain: averaged sharp time reversal, *Inverse Problems*, **31**(2015) 065007
- [89] P. Stefanov, Microlocal Analysis Methods. In *Encyclopedia of Applied and Computational Mathematics*, Springer, 914-920, 2015.
- [90] M. Lassas, L. Oksanen, P. Stefanov and G. Uhlmann, On the inverse problem of finding cosmic strings and other topological defects, to appear in *Commun. Math. Phys.* 2017.
- [91] P. Stefanov, G. Uhlmann and A. Vasy, Boundary rigidity with partial data, *J. Amer. Math. Soc.* **29**, 299–332, 2016.
- [92] P. Stefanov, Support theorems for the Light Ray transform on analytic Lorentzian manifolds, *Proc. Amer. Math. Soc.* **145**(3), 1259–1274, 2017.
- [93] P. Stefanov, G. Uhlmann and A. Vasy, On the stable recovery of a metric from the hyperbolic DN map with incomplete data, *Inverse Problems and Imaging*, 1141–1147, 10(4), 2016.
- [94] P. Stefanov, Y. Yang, Multiwave tomography with reflectors: Landweber's iteration, *Inverse Problems and Imaging* **11**(2), 373–401, 2017.
- [95] P. Stefanov, Y. Yang, Thermo and Photoacoustic Tomography with variable speed and planar detectors, *SIAM J. Math. Anal.* 49(1), 297-310, 2017.
- [96] P. Stefanov, Y. Yang, The inverse problem for the Dirichlet-to-Neumann map on Lorentzian manifolds, to appear in *Analysis & PDE*.
- [97] P. Stefanov, G. Uhlmann and A. Vasy, Local and global boundary rigidity and the geodesic X-ray transform in the normal gauge, arXiv:1702.03638.
- [98] P. Stefanov, G. Uhlmann and A. Vasy, Local recovery of the compressional and shear speeds from the hyperbolic DN map, *Inverse Problems*, **34**, 014003, 2018.
- [99] S. Holman, F. Monard and P. Stefanov, The attenuated geodesic X-ray transform, arXiv: 1708.08973, to appear in *Inverse Problems*.
- [100] R. Graham, C. Guillarmou, P. Stefanov and G. Uhlmann, X-ray transform and boundary rigidity for asymptotically hyperbolic manifolds, arXiv:1709.05053.

Volumes edited

- [1] Tomography and Inverse Transport Theory, *Contemp. Math.*, **559**(2011), coedited with Bal, Finch, Kuchment, Schotland and Uhlmann.
- [2] Inverse Problems and Applications, *Contemp. Math.*, **615** (2014), coedited with Vasy and Zworski.