

Professor Jens Marklof FRS

School of Mathematics, University of Bristol
Fry Building, Woodland Road, Bristol BS8 1UG, U.K.
Email: j.marklof@bristol.ac.uk

Education

- 1997 PhD (Dr. rer. nat.) “with distinction”, Universität Ulm
- 1994 MSc in Physics (Dipl.-Phys.) “with distinction”, Universität Hamburg

Appointments

- 2024– Henry Overton Wills Chair in Mathematics, University of Bristol
- 2023–25 President, London Mathematical Society
- 2018–23 Dean of the Faculty of Science, University of Bristol
- 2016–18 Head of the School of Mathematics, University of Bristol
- 2005–24 Professor of Mathematical Physics, School of Mathematics, University of Bristol
- 2002–05 Reader in Mathematical Physics, School of Mathematics, University of Bristol
- 2001–06 EPSRC Advanced Research Fellow, University of Bristol
- 1998–02 Lecturer in Applied Mathematics, School of Mathematics, University of Bristol
- 1998–99 Marie Curie Fellow, Institut des Hautes Études Scientifique, Bures-sur-Yvette and Laboratoire de Physique Théorique et Modèles Statistiques, Orsay
- 1997–99 Fellow of the European Post-Doctoral Institute for the Mathematical Sciences
- 1997 EPSRC Senior Visiting Fellow, Isaac Newton Institute, Cambridge
- 1997 Consultant, BRIMS, Hewlett-Packard Laboratories, Bristol
- 1996–97 Research Associate, Abteilung Theoretische Physik, Universität Ulm
- 1995–96 Visiting Fellow, Department of Mathematics, Princeton University
- 1994–94 Research Associate, II. Institut für Theoretische Physik, Universität Hamburg

Major Awards

- 2026 Distinguished Rothschild Visiting Fellowship, Isaac Newton Institute, Cambridge
- 2022–23 Royal Society Yusuf Hamied Visiting Professor, Tata Institute Mumbai
- 2015 Election as Fellow of the Royal Society
- 2012–17 ERC Advanced Grant
- 2010–12 Leverhulme Trust Research Fellowship
- 2010 Whitehead Prize, London Mathematical Society
- 2009–14 Royal Society Wolfson Research Merit Award
- 2004 Marie Curie Excellence Award, European Commission
- 2004 Philip Leverhulme Prize in Mathematics and Statistics
- 2001–06 EPSRC Advanced Research Fellowship
- 1997–99 Fellowship of the European Post-Doctoral Institute for the Mathematical Sciences
- 1997 Promotionspreis der Ulmer Universitätsgesellschaft
- 1995–96 Gottlieb Daimler and Karl Benz Fellowship

Distinguished Lectures

- 2026 Plenary Lecture, Jahrestagung der Deutschen Mathematiker-Vereinigung, Konstanz
Rothschild Public Lecture, University of Cambridge
Public Lecture, British Mathematics Colloquium, Cardiff
- 2024 Chernov Memorial Lectures, Penn State University
Brin Mathematics Research Center Distinguished Lecture, University of Maryland

2023 The Infosys Chandrasekharan Random Geometry Lecture Series, TIFR Mumbai
 2022 Plenary Speaker, QMATH15, UC Davis
 Distinguished Lecture, Faculty of Science, Hong Kong University
 2019 Invited Speaker, 13th National Congress of the Chinese Mathematical Society, Guangzhou
 2016 Lewis Fry Richardson Lecture, University of York
 2014 Invited Speaker, International Congress of Mathematicians, Seoul
 2013 Simons Lectures, SUNY Stony Brook
 2012 Essén Lectures, Uppsala University
 2009 Plenary Speaker, International Congress of Mathematical Physics, Prague
 2005 The Center for Dynamics and Geometry Lecture Series, Penn State University
 2005 Les Rencontres Mathématiques, Ecole Normale Supérieure, Lyon
 2000 German-American Frontiers of Science, National Academy of Sciences, Irvine CA
 Invited Speaker, European Congress of Mathematics, Barcelona

Research Grants

2024–26	Royal Society	£12,000	Pseudo-randomness in Diophantine approximation and adelic dynamics (with Anish Ghosh, TIFR Mumbai)
2022–26	EPSRC	£360,754	Spectral statistics for random hyperbolic surfaces
2019–23	EPSRC	£639,743	Wave transport in low-density matter, Siegel theta functions, and homogeneous flows
2012–17	ERC	€1,339,620	Homogeneous flows and their application in kinetic theory
2010–12	Leverhulme	£44,489	New kinetic transport equations for crystals
2006–12	RCUK	£250,000	Dynamical systems and number theory (Co-I) (fellowships held by A. Gorodnik and C. Ulcigrai)
2005–08	EPSRC	£156,373	Long time limit of chaotic quantum dynamics
2004–07	EPSRC	£134,594	Series summation and random continued fractions (Co-I)
2003–04	EPSRC	£10,199	Number-theoretic aspects of quantum chaos
2003–04	Leverhulme	£40,000	Visiting Professorship for Z. Rudnick, Tel Aviv University
2001–06	EPSRC	£214,591	Equidistribution, exponential sums and quantum chaos
2001–04	EPSRC	£56,145	Semiclassical dynamics of nonuniformly hyperbolic maps
2001–03	Royal Society	£9,859	Quantum unique ergodicity
2001–03	Nuffield	£4,000	Energy level statistics and quantum chaos
2000–04	Marie Curie	€1,200,000	Mathematical aspects of quantum chaos (Co-I)
1998–99	Marie Curie		n -point correlations in the spectrum of the Laplacian
1997–99	EPDI		research fellowship
1995–96	Daimler-Benz	DM 24,400	research fellowship

Invited Research Visits

2026 2 weeks, Tata Institute for Fundamental Research, Mumbai, India
 7 weeks, Isaac Newton Institute, Cambridge, U.K.
 2025 4 weeks, Tata Institute for Fundamental Research, Mumbai, India
 2024 2 weeks, Brin Mathematics Research Center, University of Maryland, USA
 2023 4 weeks, Tata Institute for Fundamental Research, Mumbai, India
 2021 2 weeks, Mittag-Leffler Institute, Djursholm, Sweden
 2020 2 weeks, Hausdorff Institute, Bonn, Germany
 2019 1 week, Hausdorff Institute, Bonn, Germany
 2018 1 week, Department of Mathematics, Uppsala Universitet, Sweden
 2017 1 week, Department of Mathematics, Uppsala Universitet, Sweden
 1 week, Mathematisches Forschungsinstitut, Oberwolfach, Germany
 2015 1 week, Mathematical Sciences Research Institute, Berkeley, USA
 6 months, Isaac Newton Institute, Cambridge, U.K.
 2014 2 weeks, Max Planck Institute for Mathematics, Bonn, Germany
 3 weeks, Institut de Mathématiques de Jussieu, Paris, France
 2013 3 weeks, Institute for Advanced Study, Princeton, USA

- 2012 1 week, Erwin Schrödinger Institut, Vienna, Austria
- 2011 1 week, Erwin Schrödinger Institut, Vienna, Austria
- 2009 1 month, Max Planck Institute for Mathematics, Bonn, Germany
- 2008 2 weeks, Erwin Schrödinger Institut, Vienna, Austria
1 week, Isaac Newton Institute, Cambridge, U.K.
- 2007 3 months, Centro De Giorgi, Scuola Normale Superiore, Pisa, Italy
- 2006 3 weeks, Institute for Advanced Study, Princeton, USA
- 2005 3 weeks, Penn State, USA
2 weeks, Centre de Recherches Mathématiques, Université de Montréal, Canada
- 2004 1 week, Department of Mathematics, Uppsala Universitet, Sweden
4 weeks, Isaac Newton Institute, Cambridge, U.K.
1 week, Instituto Superior Técnico, Lisbon, Portugal
2 weeks, Centre de Recherches Mathématiques, Université de Montréal, Canada
- 2003 1 week, Forschergruppe, Universität Bielefeld, Germany
5 weeks, Mathematical Sciences Research Institute, Berkeley, USA
2 weeks, Isaac Newton Institute, Cambridge, U.K.
- 2002 1 month, Department of Mathematics, University of Chicago, USA
1 week, Courant Institute, New York University, USA
3 weeks, Forschungsinstitut für Mathematik, ETH Zürich, Switzerland
1 week, Forschergruppe, Universität Bielefeld, Germany
- 2001 2 weeks, Forschergruppe, Universität Bielefeld, Germany
- 2000 2 weeks, Isaac Newton Institute, Cambridge, U.K.
- 1999 2 months, Mathematical Sciences Research Institute, Berkeley, USA
1 week, Hermann Minkowski Center for Geometry, Tel Aviv University, Israel
2 weeks, SFB 343 “Diskrete Strukturen in der Mathematik”, Bielefeld, Germany
- 1998 4 weeks, Hermann Minkowski Center for Geometry, Tel Aviv University, Israel
1 week, Erwin Schrödinger Institut, Austria
2 weeks, SFB 343 “Diskrete Strukturen in der Mathematik”, Bielefeld, Germany
- 1996 1 week, Institute for Mathematics and its Applications, Minneapolis, MN, USA

Major Administrative Roles at Bristol

- 2019–23 Member of University Executive Board
- 2018–23 Member of University Management Team
- 2018–23 Chair, Faculty of Science Promotions Committee
- 2018–23 Chair, Faculty of Science Equity, Diversity and Inclusion Committee
- 2016–23 Member of University Senate
- 2009–12 Director of Graduate Studies, School of Mathematics
- 2006–09 Advisory group for design of new mathematics building
- 2006–07 Coordinator of RAE2008 Pure Mathematics submission
- 2005–08 Head of Pure Mathematics Group

Service

- 2025–28 International Scientific Advisory Board, Budapest University of Technology and Economics
- 2023–25 Chair (as President), Council of the London Mathematical Society <https://www.lms.ac.uk>
- 2023–25 Chair, Campaign for Mathematical Sciences <https://www.campaignmathsci.uk>
- 2023 Leverhulme Trust Prize Committee
- 2022–24 Chair, Royal Society Sectional Committee 1
- 2021–29 Leverhulme Trust Research Awards Advisory Panel
- 2020 Leverhulme Trust Prize Committee
- 2016–20 External Advisory Board, Heilbronn Institute for Mathematical Research
- 2016 ICM 2018 Selection Panel (Dynamical Systems and ODE)

2015–18 Royal Society, Sectional Committee 1
2015 Early Career Award Committee, International Association of Mathematical Physics
2013–18 Leverhulme Trust Advisory Panel
2011–14 Research Excellence Framework 2014, Subpanel Mathematics
2004–07 LMS Regional Organizer (South West & South Wales)

PhD students

2025– Aapo Karvonen (joint with L. Monk)
2024– Daniel Meriaz (joint with L. Monk)
2021–25 Gaurav Aggarwal (joint with A. Ghosh)
2020–25 Zonglin Li
2020– Sam Pattison
2016–20 Christopher Lutsko
2013–17 Jory Griffin
2012–16 Daniel El-Baz
2010–14 Emek Demirci Akarsu
2006–10 Henrik Ueberschär
2004–08 David Smith (joint with R.E. Wilson)
2002–05 Ian Williams (joint with J.P. Keating)
2002–05 Christopher Wheeler (joint with J.P. Keating)
2001–04 Stephen O’Keefe

Postdocs

2025– Yulin Gong
2022–24 Laura Monk
2020–23 Soren Mikkelsen
2019–22 Matthew Welsh
2015–17 Etienne Le Masson
2015–17 Nadav Yesha
2012–15 Jimmy Tseng
2012–15 Ilya Vinogradov
2004–06 Lech Wolowski
2003–08 Roman Schubert
2001–02 Andreas Strömbergsson

Publications

Research papers

- [1] W. Kim, J. Marklof and M. Welsh, Values of ternary quadratic forms at integers and the Berry-Tabor conjecture for 3-tori, arXiv preprint arXiv:2601.03209
- [2] J. Marklof, A. Strömbergsson and S. Yu, Extreme events and impact statistics for unipotent actions on the space of lattices arXiv preprint arXiv:2510.11371
- [3] J. Marklof, Square roots and lattices, *L’Enseignement Mathématique* 72 (2026), no. 1/2, 75-190
- [4] J. Marklof and M. Pollicott, Extreme events for horocycle flows, *Nonlinearity* 38 (2025), no. 5, Paper No. 055003, 25 pp
- [5] W. Kim and J. Marklof, Poissonian pair correlation for directions in multi-dimensional affine lattices, and escape of mass estimates for embedded horospheres, *Ergodic Theory and Dynamical Systems* 45 (2025) 218-246
- [6] J. Marklof and L. Monk, The moduli space of twisted Laplacians and random matrix theory, *International Mathematics Research Notices* (2024) 14352-14368
- [7] J. Marklof, The log moments of smallest denominators, *Integers* 24 (2024), Paper No. A55, 13 pp.
- [8] J. Marklof, Smallest denominators, *Bulletin of the London Mathematical Society* 56 (2024), no. 6, 1920-1938
- [9] J. Marklof and A. Strömbergsson, Kinetic theory for the low-density Lorentz gas, *Memoirs of the American Mathematical Society*, Volume 294 (2024), Number 1464, v+136 pp

- [10] J. Marklof and M. Welsh, Bounds for theta sums in higher rank II, *Journal d'Analyse Mathématique* 151 (2023) 235-264 (Special issue dedicated to Peter Sarnak)
- [11] J. Marklof and M. Welsh, Bounds for theta sums in higher rank I, *Journal d'Analyse Mathématique* 150 (2023) 325-358
- [12] J. Marklof and M. Welsh, Fine-scale distribution of roots of quadratic congruences, *Duke Mathematical Journal* 172 (2023), no. 12, 2303-2364
- [13] A. Haynes and J. Marklof, A five distance theorem for Kronecker sequences, *International Mathematics Research Notices* (2022) 19747-19789
- [14] J. Griffin and J. Marklof, Quantum transport in a crystal with short-range interactions: The Boltzmann-Grad limit, *Journal of Statistical Physics* 184 (2021) no. 16; 46pp
- [15] J. Marklof, Delone sets generated by square roots, *American Mathematical Monthly* 127 (2020) 836-840
- [16] J. Marklof, Pair correlation and equidistribution on manifolds, *Monatshefte für Mathematik* 191 (2020) 279-294
- [17] A. Haynes and J. Marklof, Higher dimensional Steinhaus and Slater problems via homogeneous dynamics, *Annales scientifiques de l'École normale supérieure* 53 (2020) 537-557
- [18] J. Griffin and J. Marklof, Quantum transport in a low-density periodic potential: homogenisation via homogeneous flows, *Pure and Applied Analysis* 1 (2019) 571-614
- [19] J. Marklof and N. Yesha, Pair correlation for quadratic polynomials mod 1, *Compositio Mathematica* 154 (2018) 960-983
- [20] J. Marklof and I. Vinogradov, Directions in hyperbolic lattices, *Journal für die reine und angewandte Mathematik* 740 (2018) 161-186
- [21] M. Lee and J. Marklof, Effective equidistribution of rational points on expanding horospheres, *International Mathematics Research Notices* (2018) 6581-6610
- [22] J. Marklof and A. Strömbergsson, The three gap theorem and the space of lattices, *American Mathematical Monthly* 124 (2017) 741-745
- [23] C.P. Dettmann, J. Marklof and A. Strömbergsson, Universal hitting time statistics for integrable flows, *Journal of Statistical Physics* 166 (2017) 714-749 (Special issue dedicated to David Ruelle and Ya.G. Sinai)
- [24] J. Marklof, Entry and return times for semi-flows, *Nonlinearity* 30 (2017) 810-824
- [25] J. Marklof and I. Vinogradov, Spherical averages in the space of marked lattices, *Geometriae Dedicata* 186 (2017) 75-102
- [26] F. Cellarosi and J. Marklof, Quadratic Weyl sums, automorphic functions, and invariance principles, *Proceedings of the London Mathematical Society* 113 (2016) 775-828
- [27] J. Marklof and B. Tóth, Superdiffusion in the periodic Lorentz gas, *Communications in Mathematical Physics* 347 (2016) 933-981
- [28] J. Marklof and A. Strömbergsson, Generalized linear Boltzmann equations for particle transport in polycrystals, *Applied Mathematics Research Express* 2015 (2015) 274-295
- [29] J. Marklof and A. Strömbergsson, Visibility and directions in quasicrystals, *International Mathematics Research Notices* (2015) 6588-6617
- [30] D. El-Baz, J. Marklof and I. Vinogradov, The two-point correlation function of the fractional parts of \sqrt{n} is Poisson, *Proceedings of the American Mathematical Society* 143 (2015) 2815-2828
- [31] D. El-Baz, J. Marklof and I. Vinogradov, The distribution of directions in an affine lattice: two-point correlations and mixed moments, *International Mathematics Research Notices* (2015) 1371-1400
- [32] J. Marklof and A. Strömbergsson, Power-law distributions for the free path length in Lorentz gases, *Journal of Statistical Physics* 155 (2014) 1072-1086 (Special issue dedicated to Herbert Spohn)
- [33] J. Griffin and J. Marklof, Limit theorems for skew translations, *Journal of Modern Dynamics* 8 (2014) 177-189
- [34] J. Marklof and A. Strömbergsson, Free path lengths in quasicrystals, *Communications in Mathematical Physics* 330 (2014) 723-755
- [35] J. Marklof and A. Strömbergsson, Gaps between logs, *Bulletin of the London Mathematical Society* 45 (2013) 1267-1280
- [36] E. Demirci Akarsu and J. Marklof, The value distribution of incomplete Gauss sums, *Mathematika* 59 (2013) 381-398
- [37] J. Marklof, Fine-scale statistics for the multidimensional Farey sequence, in: *Limit Theorems in Probability, Statistics and Number Theory*, Springer Proceedings in Mathematics & Statistics 42, 2013, pp. 49-57 (Festschrift in honour of Friedrich Götze)

- [38] H. Guillet de Chatellus, O. Jacquin, O. Hugon, W. Glastre, E. Lacot and J. Marklof, Generation of ultrahigh and tunable repetition rates in CW injection-seeded frequency-shifted feedback lasers, *Optics Express* 21 (2013) 15065-15074
- [39] J. Marklof and A. Strömbergsson, Diameters of random circulant graphs, *Combinatorica* 33 (2013) 429-466
- [40] J. Marklof and Z. Rudnick, Almost all eigenfunctions of a rational polygon are uniformly distributed, *Journal of Spectral Theory* 2 (2012) 107-113
- [41] J. Marklof and A. Strömbergsson, The periodic Lorentz gas in the Boltzmann-Grad limit: Asymptotic estimates, *GAFAGeometric and Functional Analysis* 21 (2011) 560-647
- [42] P. Bachurin, K. Khanin, J. Marklof and A. Plakhov, Perfect retroreflectors and billiard dynamics, *Journal of Modern Dynamics* 5 (2011) 33-48
- [43] J. Marklof and A. Strömbergsson, The Boltzmann-Grad limit of the periodic Lorentz gas, *Annals of Mathematics* 174 (2011) 225-298
- [44] J. Marklof and A. Strömbergsson, The distribution of free path lengths in the periodic Lorentz gas and related lattice point problems, *Annals of Mathematics* 172 (2010) 1949-2033
- [45] J. Marklof, Horospheres and Farey fractions, *Contemporary Mathematics* 532 (2010) 97-106
- [46] J. Marklof, The asymptotic distribution of Frobenius numbers, *Inventiones Mathematicae* 181 (2010) 179-207
- [47] J.P. Keating, J. Marklof and B. Winn, Localised eigenfunctions in Seba billiards, *Journal of Mathematical Physics* 51 (2010) 062101 (19 pages)
- [48] J. Marklof and A. Strömbergsson, Kinetic transport in the two-dimensional periodic Lorentz gas, *Nonlinearity* 21 (2008) 1413-1422
- [49] J. Keating, J. Marklof and I. Williams, Nodal domain statistics for quantum chaotic maps, *New Journal of Physics* 10 (2008) 083023 (31pp)
- [50] J. Marklof, Y. Tourigny and L. Wolowski, Explicit invariant measures for products of random matrices, *Transactions of the American Mathematical Society* 360 (2008) 3391-3427
- [51] J. Marklof, Spectral theta series of operators with periodic bicharacteristic flow, *Annales de l'Institut Fourier* 57 (2007) 2401-2427 (Colin de Verdiere special issue)
- [52] J. Marklof, Y. Tourigny and L. Wolowski, Pade approximants of random Stieltjes series, *Proceedings of the Royal Society A* 463 (2007) 2813-2832.
- [53] K. Khanin, J. Lopes Dias and J. Marklof, Multidimensional continued fractions, dynamical renormalization and KAM theory, *Communications in Mathematical Physics* 270 (2007) 197-231
- [54] J. Keating, J. Marklof and I. Williams, Nodal domain statistics for quantum maps, percolation and stochastic Loewner evolution, *Physical Review Letters* 97 (2006) 034101 (4pp)
- [55] K. Khanin, J. Lopes Dias and J. Marklof, Renormalization of multidimensional Hamiltonian flows, *Nonlinearity* 19 (2006) 2727-2753
- [56] J. Marklof, Quantum leaks, *Communications in Mathematical Physics* 264 (2006) 303-316
- [57] A. Eskin, J. Marklof and D. Witte Morris, Unipotent flows on the space of branched covers of Veech surfaces, *Ergodic Theory and Dynamical Systems* 26 (2006) 129-162
- [58] J. Marklof, Mean square value of exponential sums related to the representation of integers as sums of squares, *Acta Arithmetica* 117 (2005) 353-370
- [59] D. Kutasov, J. Marklof and G.W. Moore, Melvin models and diophantine approximation, *Communications in Mathematical Physics* 256 (2005) 491-511
- [60] J. Marklof and S. O'Keefe, Weyl's law and quantum ergodicity for maps with divided phase space, with an appendix by S. Zelditch, *Nonlinearity* 18 (2005) 277-304
- [61] O. Giraud, J. Marklof and S. O'Keefe, Intermediate statistics in quantum maps, *Journal of Physics A* 37 (2004) L303-L311
- [62] J. Marklof, Holomorphic almost modular forms, *Bulletin of the London Mathematical Society* 36 (2004) 647-655
- [63] J. Marklof and A. Strömbergsson, Equidistribution of Kronecker sequences along closed horocycles, *GAFAGeometric and Functional Analysis* 13 (2003) 1239-1280
- [64] J.P. Keating, J. Marklof and B. Winn, Value distribution of the eigenfunctions and spectral determinants of quantum star graphs, *Communications in Mathematical Physics* 241 (2003) 421-452
- [65] J. Marklof, Almost modular functions and the distribution of n^2x modulo one, *International Mathematics Research Notices* 39 (2003) 2131-2151
- [66] J. Marklof, Pair correlation densities of inhomogeneous quadratic forms, *Annals of Mathematics* 158 (2003) 419-471

- [67] J. Marklof, Pair correlation densities of inhomogeneous quadratic forms II, *Duke Mathematical Journal* 115 (2002) 409-434; Correction, *ibid.* 120 (2003) 227-228
- [68] S. Keppeler, J. Marklof and F. Mezzadri, Quantum cat maps with spin $\frac{1}{2}$, *Nonlinearity* 14 (2001) 719-738
- [69] J. Marklof and Z. Rudnick, Quantum unique ergodicity for parabolic maps, *GAFGA Geometric and Functional Analysis* 10 (2000) 1554-1578
- [70] J. Marklof, The n -point correlations between values of a linear form, with an appendix by Z. Rudnick, *Ergodic Theory and Dynamical Systems* 20 (2000) 1127-1172
- [71] J. Marklof, Theta sums, Eisenstein series, and the semiclassical dynamics of a precessing spin, D. Hejhal, J. Friedman, M. Gutzwiller and A. Odlyzko (eds.), *Emerging Applications of Number Theory*, IMA Volumes in Mathematics and its Applications, Volume 109 (Springer, New York, 1999), 405-450
- [72] J. Marklof, Limit theorems for theta sums, *Duke Mathematical Journal* 71 (1999) 127-153.
- [73] J. Marklof, Spectral form factors of rectangle billiards, *Communications in Mathematical Physics* 199 (1998) 169-202
- [74] P. Stifter, C. Leichtle, W.P. Schleich and J. Marklof, Das Teilchen im Kasten: Strukturen in der Wahrscheinlichkeitsdichte, *Zeitschrift für Naturforschung* 52 a (1997) 377-385
- [75] J. Marklof, On multiplicities in length spectra of arithmetic hyperbolic three-orbifolds, *Nonlinearity* 9 (1996) 517-536
- [76] R. Aurich and J. Marklof, Trace formulae for three-dimensional hyperbolic lattices and application to a strongly chaotic tetrahedral billiard, *Physica D* 92 (1996) 101-129

Review articles, lecture notes

- [77] J. Marklof, Random lattices in the wild: from Polya's orchard to quantum oscillators, Feature, London Mathematical Society Newsletter, Issue 493 (2021) 42-49
- [78] J. Marklof, The low-density limit of the Lorentz gas: periodic, aperiodic and random, Proceedings of the ICM 2014, Seoul, Vol. III, pp. 623-646
- [79] J. Marklof, Kinetic limits of dynamical systems, in: *Hyperbolic Dynamics, Fluctuations and Large Deviations*, eds. D. Dolgopyat, Y. Pesin, M. Pollicott, L. Stoyanov, Proc. Symp. Pure Math., American Mathematical Soc. 2015, pp. 195-223
- [80] J. Marklof, Selberg's trace formula: an introduction, in: *Hyperbolic Geometry and Applications in Quantum Chaos and Cosmology*, eds. J. Bolte and F. Steiner, Cambridge University Press 2011, pp. 83-119
- [81] J. Marklof, Horospheres, Farey fractions and Frobenius numbers, *Oberwolfach Report 29/2010*, pp. 28-32
- [82] J. Marklof, Kinetic transport in crystals, *Proceedings of the XVIIIth International Congress on Mathematical Physics*, Prague 2009, pp. 162-179
- [83] J. Marklof, Arithmetic quantum chaos, *Encyclopedia of Mathematical Physics*, eds. J.-P. Francoise, G.L. Naber and Tsou S.T., Oxford: Elsevier, 2006, Volume 1, pp. 212-220
- [84] J. Marklof, Energy level statistics, lattice point problems and almost modular functions, *Frontiers in Number Theory, Physics and Geometry. Volume 1: On random matrices, zeta functions and dynamical systems*, eds. P. Cartier, B. Julia, P. Moussa and P. Vanhove; Springer, 2006, pp. 163-181
- [85] J. Marklof, Cat map, *Encyclopedia of Nonlinear Science*, Routledge, New York, 2004
- [86] J. Marklof, Level spacing statistics and integrable dynamics, *Proceedings of the XIIIth International Congress on Mathematical Physics*, London 2000 (International Press, Boston, 2001) 359-363
- [87] T. Kriecherbauer, J. Marklof and A. Soshnikov, Random matrices and quantum chaos, *Proceedings of the National Academy of Sciences (USA)* 98 (2001) 10531-10532
- [88] J. Marklof, The Berry-Tabor conjecture, *Proceedings of the 3rd European Congress of Mathematics*, Barcelona 2000, Progress in Mathematics Vol. 202 (Birkhäuser, Basel, 2001) 421-427