May 12, 2023

Curriculum Vitae – Tadahisa FUNAKI

Research Fellow
Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)

Professor Emeritus
University of Tokyo

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Research Interests:
  Probability Theory, Mathematical Physics

Personal Data:
  Date of birth: 1951.12.06 *
  Birthplace: Tokyo, Japan
  Citizenship: Japan

Education:
  Ph.D. in Mathematics (Nagoya University), 1982.02.04
  University of Tokyo, 1974.04.01–1976.03.31; Master of Science in Mathematics, 1976.03.26
  University of Tokyo, 1970.04.01–1974.03.31; Bachelor of Science in Mathematics, 1974.03

Academic Appointments:
  BIMSA, Research Fellow, 2022.09.19–present
  Waseda University, Professor, 2017.04.01–2022.03.31
  University of Tokyo, Professor, 1995.10.01–2017.03.31, Professor Emeritus, 2017.06.13
  Nagoya University, Professor, 1992.06.01–1995.09.30
  Nagoya University, Associate Professor, 1985.07.16–1992.05.31
  Nagoya University, Lecturer, 1984.04.01–1985.07.15
  Nagoya University, Research Associate, 1979.02.01–1984.03.31
  Hiroshima University, Research Associate, 1977.04.01–1979.01.31

  Meiji University, Visiting Professor, 2016.04.01–2017.03.31
  Waseda University, Guest Professor (Visiting Professor), 2011.04.01–2014.03.20
  Nagoya University, Concurrent Professor, 1995.10.01-1998.03.31

Editorial Activities:
  · Springer Monographs in Mathematics, Editorial Board, 2018–present
  · Forum of Mathematics, Pi and Sigma, Cambridge University Press, Editor, 2012–2023.03
  · Stochastics and Partial Differential Equations: Analysis and Computations, Springer, Editor, 2012–present
  · Journal of Mathematical Sciences, The University of Tokyo, Editor, 2002–2017
  · Probability and Mathematical Statistics, Wrocław University and Wrocław University of Technology, Associate editor, 2006–2010

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  *(Year.Month.Day), also below

- Annales de l'Institut Henri Poincaré, Probabilités et Statistique, Editor, 2005–2012
- Annals of Probability, Associate editor, 1994–2000
- Nagoya Mathematical Journal, Editor, 1992–2095; Associate editor 2005–2007
- 数学叢書，岩波書店，編集顧問, 2009–2019

Activities in Mathematical Society of Japan:
- MSJ, President, 2013.06–2015.05
- MSJ Trustee, 2006–2008, 2013–2017
- MSJ, Scientific Committee (学術委員会), 2000.07–2003.06, 2008.07–2011.06
- MSJ, Committee for MSJ Analysis Prize, Chairman, 2016.06–2017.05; Member, 2005–2007
- MSJ Memoirs, Editor, 2000.07–2009.06
- MSJ Sugaku Tsushin (数学通信), Editor-in-chief, 2006.05–2008.05

Academic Services for Other Institutions:
- Kyoto University, RIMS, Steering Committee Member, 2015.09.01–2019.08.31
- Kyoto University, RIMS, Expert Committee Member, 2019.09.01–2021.08.31
- Meiji University, MIMS (Meiji Institute for Advanced Study of Mathematical Sciences) MEXT (文部科学省) Joint Usage/Research Center, Steering Committee Member, 2014.04.01–present
- Meiji University, MIMS Academic Staff, 2014.04.01–2017.03.31
- Meiji University, MIMS Researcher, 2017.06.01–2023.03.31
- MEXT, Science and Technology Council, Expert Committee Member, 2015.04.01–2016
- Institute of Mathematics, Academia Sinica, Taiwan, External Evaluation Committee Member, 2015.07.20–07.22
- National Institution for Academic Degrees and University Evaluation, Member of Committee for Academic Degrees, 2005.04–2014.03
- JSPS (日本学術振興会), Member of Examination Committee for Special Researchers, 2003.07–2005.06

Organizer and Committee Member of Conferences and Workshops:
- ReaDiNet 2023: Scientific Committee, Taipei (Taiwan), October 2023.
- The 11th International Conference on Stochastic Analysis and its Applications, Edinburgh, Scientific committee, 2023.06.26–06.30.
- 19th workshop on Stochastic Analysis on Large Scale Interacting Systems, Waseda University, 2021.12.07–12.09
- ReaDiNet 2021: An online conference on recent topics in reaction-diffusion systems, biology, medicine and chemistry, Scientific Committee, 2021.10.25–10.29
- 10th International Conference on Stochastic Analysis and its Applications, Kyoto University, Scientific Committee, 2021.09.06–09.10
- 20th International Congress on Mathematical Physics, Geneva, Switzerland, Organizer of Invited Session "Nonequilibrium Statistical Mechanics", 2021.08.02–08.07
- ReaDiNet 2020: An online conference on mathematical biology, Scientific Committee, 2020.10.19–10.23
- GDRI ReaDiNet (日仏韓台): Reaction-Diffusion Network in Mathematics and Biomedicine, Steering Committee, 2015–present

- ReaDiNet2019: Mathematical Analysis for Biology and Ecology, INRIA Nancy, Scientific Committee, 2019.09.23–09.25
- 18th workshop on Stochastic Analysis on Large Scale Interacting Systems, Osaka University, Organizer, 2019.11.05–11.08
- One-day Symposium: Hydrodynamic Limit and Related Topics, Waseda University, Organizer, 2019.12.20
- 12th AIMS Conference "Dynamical Systems, Differential Equations and Applications", Taipei, Taiwan, Member of Global Organizing Committee and Organizer of Special Session "Stochastic Modeling in Biology, Phase Transitions and Fluid Dynamics: Theory and Approximation", 2018.07.05–07.09
- Probability Summer School 2018, Nagoya University, Organizer, 2018.08.27–08.30
- 17th workshop on Stochastic Analysis on Large Scale Interacting Systems, RIMS Kyoto University, Organizer, 2018.11.05–11.08
- 16th workshop on Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, Organizer, 2017.11.06–11.09
- Meeting in honor of Herbert Spohn's 70th birthday, Tokyo Institute of Technology, Organizer, 2017.01.11–01.12
- Fluid Mathematics, Waseda University-TU Darmstadt IRTG Japan-Germany Joint Graduate Program, Member, 2009–2017
- 15th workshop on Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, Organizer, 2016.11.02–11.04
- Stochastic PDE's, Large Scale Interacting Systems and Applications to Biology, University Paris-Sud at Orsay, Organizer, 2016.03.09–03.11
- Reaction-Diffusion Systems in Mathematics and Biomedicine, Fréjus (Cote d'Azur), Organizer, 2016. 09.18–09.22
- Stochastic Analysis of Spatially Extended Models, Winter School, TU Darmstadt, Germany, Organizer, 2015.03.23-03.27
- Stochastic Analysis, in celebration of the centennial of the birth of Kiyosi Itô, Kyoto University, Organizer, 2015.09.07–09.11
- 14th workshop on Stochastic Analysis on Large Scale Interacting Systems, Kyoto University, Organizer, 2015.10.26–10.29
- Kyoto University RIMS, 2015 Project Research "Stochastic Analysis", Organizing Committee
- Mathematics and its Applications to Complex Phenomena arising in Biology, Chemistry and Medicine, CIRM, Luminy, France, Organizer, 2014.06.03–06.05
- 37th Conference on Stochastic Processes and Applications, Buenos Aires, Scientific Committee, 2014.07.28–08.01
- Probability Summer School 2014, Shinshu University, Organizer, 2014.09.09–09.12:
- 13th workshop on Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, Organizer, 2014.11.05–11.07
- ReaDiLab (日仏), Steering Committee, 2014
- 12th workshop on Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, Organizer, 2013.11.21–11.23
- Scientific Committee of the project "Perspectives in Analysis and Probability" at the Lebesgue Center for Mathematics, France, 2013
- 11th workshop on Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, Organizer, 2012.07.05-07.06

- 2nd IMS Asia Pacific Rim Meeting, Tsukuba, Session Organizer, (Plenary: Varadhan), 2012.07.02–07.04
- Mathematical Physics and Stochastic Analysis, Shonan International Village Center, Organizer, 2012.03.12–03.14
- Probability Symposium, Kansai University, Organizer, 2011.12.19–12.22
- 34th Conference on Stochastic Processes and their Applications, Osaka, Member of Scientific Program Committee, 2010.09
- 9th workshop on Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, Organizer, 2010.09.13–09.17
- International Conference on Fluid Mathematics, Waseda University, Organizer, 2010.03.08–03.16
- Member of Committee for Conferences on Stochastic Processes, Bernoulli Society for Mathematical Statistics and Probability, 2001–2009
- 8th workshop on Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, Organizer, 2009.10.07–10.09
- International Conference "Stochastic Analysis and Applications", Nishijin Plaza, Kyushu University, Organizer, 2008.09.08–09.12
- 7th workshop on Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, Organizer, 2008.11.04–11.06
- 6th International Conference on Stochastic Analysis on Large Scale Interacting Systems, Nishijin Plaza, Kyushu University, Organizer, 2007.10.22–10.26
- 30th Stochastic Processes and their Applications, University of California at Santa Barbara, Bernoulli Society, Member of Program Committee, 2005.06.26–07.01
- Statistical Mechanics of Interfaces and Stochastic Analysis II, University of Tokyo, Organizer, 2005.07
- MSJ - International Research Institute "Stochastic Analysis on Large Scale Interacting Systems", Chairman, Shonan International Village Center, 2002.07
- Lattice Gasses and Interface Model, Ryukyu University, Organizer, 2002.02.12–02.15
- Kyoto University RIMS, 2002 Project Research "Stochastic Analysis and Related Topics", Organizer, 2002
- Probability Theory and Related Fields, Kyoto University RIMS, Organizer, 2001.12.10–12.13
- 5th World Congress of the Bernoulli Society and the Year 2000 IMS Annual Meeting, Session Organizer of "Probability Methods in Mathematical Physics", Guanajuato, Mexico, 2000.05.15–05.20
- Probability Summer School 2000, University of Tokyo, Organizer, 2000.07.31–08.03
- Hydrodynamic Limit, Shonan International Village Center, Organizer, 2000.10.26–10.29
- Probability Theory and Related Fields, Kyushu University International Hall, Organizer, 2000.12.11–12.14
- Hydrodynamic Limit Autumn School, Kusatsu Seminar House, Gunma Prefecture, Organizer, 1999.09.04–09.07
- Stochastic Analysis and its Application, University of Tokyo, Organizer, 1999.11.18–11.20
- Hydrodynamic Limit, University of Tokyo, Organizer, 1998.11.19–11.21
- Hydrodynamic Limit, University of Tokyo, Organizer, 1997.11.06–11.08
- Conference on Stochastic Differential and Differentia Equations, Hungary, Györ, International Program Committee, 1996.08.21–08.24

- Non-equilibrium Statistical Mechanics and Probability Theory, University of Tokyo, Organizer, 1996.09.27-09.28
- Workshop on "Stochastic Methods for Nonlinear PDEs", IMA, University of Minnesota, USA, Organizer, 1994.03

Prizes and Distinctions:
- 2007.09.22: MSJ Autumn Prize
- 2002.09.27: MSJ Analysis Prize
- 2022: Invited speaker at International Congress of Mathematicians 2022, Sections "Probability" and "Stochastic and Differential Modelling", Virtual Online event, 2022.07.12
- 2013: Plenary speaker at 36th Stochastic Processes and Applications, Invariant Measures for a Linear Stochastic Heat Equation related to the KPZ Equation, University of Colorado Boulder, 2013.08.01
- 2007: Plenary Speaker at MSJ Autumn Meeting, Stochastic Analysis on Large Scale Interacting Systems and its Development, Tohoku University, 2007.09.22
- 2003: Lectures at 33rd International Probability School, Stochastic Interface Models, Saint–Flour (Cantal), France, 2003.07.07–07.23
- 2000: Plenary Speaker at MSJ Autumn Meeting, Statistical Mechanics of Interfaces – Attempt from Stochastic Analysis, Kyoto University, 2000.09.25
- 1998: Plenary speaker at 25th Stochastic Processes and Applications, Interface Dynamics from Stochastic Models, Corvallis, Oregon State University, 1998.07.06
- 1996: Special Lecture on 50th Anniversary of MSJ, Stochastic Models of Phase Separation and Evolution Equations of Interfaces, Tokyo Metropolitan University, 1996.09.14

Students:

Ph.D. theses

- 2017.03 L. Xu (徐 路): Scaling limits in stochastic heat equation and stochastic chain model
- 2017.03 K. Lee (李 嘉衣): Sharp interface limit for the stochastic Allen-Cahn equation
- 2017.03 M. Hoshino (星野 壮登): Approximations of singular stochastic PDEs and their global well-posedness
- 2016.03 K. Tsunoda (角田 謙吉): Derivation of Stefan problem and large deviation principles for lattice-gas
- 2012.03 S. Yokoyama (横山 聡): Two-dimensional stochastic Navier-Stokes equations derived from a certain variational problem
- 2011.03 M. Sasada (佐々田 槙子): Hydrodynamic limit and equilibrium fluctuation for nongradient systems
- 2009.03 T. Otobe (乙部 達志): Large deviations and limit theorems of law of large numbers' type for the processes related to the interface models
- 2008.03 J. Misumi (三角 淳): Long-range percolation and random walks on the corresponding random graphs
- 2008.03 B. Xie (謝 賓): On stochastic PDEs with non-Lipschitz coefficients and invariant measures for a stochastic heat equation
- 2007.03 K. Ishitani (石谷 謙介): On an optimal control problem in mathematical finance and divergence theorem in path spaces

- 2003.09 N. Ichihara (市原 直幸): Homogenization problems for a class of stochastic partial differential equations
- 2002.03 H. Sakagawa (坂川 博宣): Entropic repulsion and large deviation principle in stochastic equilibrium model of phase separation
- 2002.03 M. Fukuyama (福山 真彦): A Nim game played on graphs
- 2001.03 Y. Otobe (乙部 厳己): Gibbs measure with hard-wall potential from a view point of stochastic partial differential equation with reflection
- 2001.03 T. Nishikawa (西川 貴雄): Hydrodynamic limit for the Ginzburg-Landau $\nabla\phi$ interface model with a conservation law.
- 2001.03 Y. Hariya (針谷 祐): Gibbs measures on $C(\mathbf{R}; \mathbf{R}^d)$ – an application for hard-wall Gibbs measures on $C(\mathbf{R}; \mathbf{R})$ (Practical advisor: H. Osada)
- 1995.10 (Nagoya University) M. Sugiura (杉浦 誠): Metastable behaviors of diffusion processes with small parameter

Master theses

- 2021.03 (Waseda University) Y. Nishijima (西嶋 悠人): Stochastic six vertex model and its extension
- 2020.03 (Waseda University) K. Koshiishi (輿石 健太): Study of two or single-components particle systems by numerical simulations
- 2019.03 (Waseda University) J. Segawa (瀬川 絢哉): Invariant measures in discrete coupled KPZ equations without trilinear condition
- 2019.03 (Waseda University) S. Nakajima (中島 翔平): Uniqueness of weak solutions to SPDE with fractional Laplacian and non-Lipschitz coefficients
- 2017.03 S. Nakada (中田 智史): A stochastically perturbed volume preserving mean curvature flow
- 2016.03 M. Hoshino (星野 壮登): KPZ equation with fractional derivatives of white noise
- 2015.03 M. Tai (田井 みなみ): Asymptotic behavior of transition layers under an invariant measure of stochastic Allen-Cahn equation
- 2014.03 L. Xu (徐 路): Central limit theorem for stochastic heat equations with periodic coefficients
- 2014.03 K. Lee (李 嘉衣): The generation of interface for the stochastic Allen-Cahn equation
- 2013.03 K. Tsunoda (角田 謙吉): Hydrodynamic limit for a certain class of two-species zero-range processes .
- 2012.03 K. Mitome (三留 弘太郎): Small random perturbations for ordinary differential equations with non-Lipschitz drifts
- 2011.03 Y. Sugawara (菅原 遊): Asymptotic behavior of current of infinite particle system of independent stable processes
- 2011.03 H. Hozumi (穂積 寛之): Local limit theorem for a sum of unbounded and weighted random variables
- 2011.03 T. Miyake (三宅 泰記): An invariance principle for wave fronts in a stochastic reaction-diffusion equation
- 2009.03 S. Yokoyama (横山 聡): An SPDE with higher order differential operators and reflection
- 2009.03 K. Shirataki (白滝 桂太郎): Hydrodynamic limit for multi-species exclusion process

- 2009.03 M. Sasada (佐々田 槇子): Hydrodynamic limit for two-species exclusion processes and particle systems with degenerate rates
- 2007.03 Y. Izawa (井澤 佑介): On the moments of Wiener integrals for a reflecting Brownian motion
- 2007.03 K. Yamamoto (山本 幸司): Hydrodynamic limit for particle systems on a randomly distorted lattice
- 2006.03 K. Toukairin (東海林 紘): Dynamic approach to a stochastic domination and related inequalities
- 2005.03 B. Xie (謝 賓): A stochastic partial differential equation with a Lévy process's distribution as its invariant measure
- 2005.03 M. Kikuchi (菊池 正史): Method based on Besov norm to derive accurate direction dependent continuity of random fields
- 2004.03 K. Ishitani (石谷 謙介): Integration by parts formulas for Wiener measures on path spaces with reflection
- 2004.03 J. Misumi (三角 淳): Random walks on percolation clusters: Estimates of Green function and homogenization
- 2000.03 N. Ichihara (市原 直幸): Approximation theorem for stochastic partial differential equations due to backward stochastic differential equations
- 1999.03 H. Sakagawa (坂川 博宣): 1. The reversible measures of interacting diffusion system with plural conservation laws, 2. Equivalence between canonical Gibbs measures and stationary measures for stochastic lattice-gas model
- 1998.03 Y. Otobe (乙部 厳己): White noise driven stochastic diffusion equations defined on infinite interval with reflection
- 1996.03 (Nagoya University) S. Yokoyama (横山 聡): On the regularity of solutions of stochastic partial differential equations with pseudo differential operators

Ph.D. committee outside Japan (2018—)

- 2021.07.19 Renato Ricardo de Paula, Hydrodynamic behavior of a degenerate microscopic dynamics with slow reservoirs, Mathematics Department, Instituto Superior Tecnico, University of Lisbon, Portugal, Zoom, advisors: Patricia Gonçalves, Adriana Neumann de Oliveira
- 2019.08 Huanyu Yang, Stochastic Cahn-Hilliard equations and their sharp interface limits, Faculty of Mathematics, Bielefeld University, advisors: Rongchan Zhu and Michael Röckner
- 2019.04 Henri Elad Altman, Integration by parts formulae for the laws of Bessel bridges, and Bessel stochastic PDEs, Sorbonne Université (Univ. Paris 6), advisor: Lorenzo Zambotti
- 2019.02 Roberto Boccagna, Fick's law and phase transitions, Gran Sasso Science Institute, L'Aquila Italy, advisor: Errico Presutti
- 2018.10 Perla El Kettani, Local and nonlocal stochastic evolution equations in phase transition problems, Laboratoire de Mathématiques d'Orsay, Université Paris Sud, France, advisor: Danielle Hilhorst
- 2018.02 Monia Capanna, Hydrodynamic limit and critical fluctuations in stochastic particle systems, Università degli studi dell'Aquila, Italy, advisor: Anna De Masi

Grants: (listed only those received as an principal investigator)
JSPS = Japan Society for the Promotion of Science (日本学術振興会)

- JSPS, Grant-in-Aid for Scientific Research (A), Study on large scale interacting systems and related stochastic partial differential equations (No:18H03672), 2018-2023
- JSPS, Invitational Fellowship for Research in Japan, Sunder Sethuraman (University of Arizona, USA), 2018.10.01–11.14,
- JSPS, Grant-in-Aid for Scientific Research (B), Stochastic analysis on large scale interacting systems and its development (No: 26287014), 2014–2018
- JSPS, Grant-in-Aid for Challenging Research, Stochastic analytic study on Kardar-Parisi-Zhang equation (No: 26610019), 2014–2016
- JSPS, Grant-in-Aid for Scientific Research (A), Stochastic analysis on large scale interacting systems and its applications (No: 22244007), 2010–2014
- JSPS, Overseas Research Fellowship, Michael Allman (Warwick University, UK), 2010.01.12–05.11
- JSPS, Grant-in-Aid for Challenging Research, Study on stochastic partial differential equations with singular coefficients (No: 21654021), 2009–2011
- JSPS-DFG, Japan-Germany Cooperative Research, Hendrik Weber (University of Bonn), Tobias Kuna (Reading University, UK), Oleksandr Kutovyi (Bielefeld University), Jean-Dominique Deuschel (TU Berlin), 2008-2009
- JSPS-DFG, Japan-Germany Cooperative Research, Jean-Dominique Deuschel (TU Berlin), 2005-2006
- JSPS, Grant-in-Aid for Scientific Research (A), Stochastic analysis on large scale interacting systems (No: 18204007), 2006–2009
- JSPS, Grant-in-Aid for Exploratory Research, Stochastic analysis on interface model with singularity (No: 17654020), 2005–2007
- JSPS, Grant-in-Aid for Scientific Research (B), Probabilistic study on large scale interacting systems (No: 14340029), 2002–2005
- JSPS, Grant-in-Aid for Exploratory Research, Stochastic dynamical approach to wetting transition of interface model (No: 13874015), 2001–2003
- JSPS, Grant-in-Aid for Scientific Research (A), Comprehensive research of probability theory (No: 11304003), 1999–2001
- JSPS, Grant-in-Aid for Scientific Research (B), Study on hydrodynamic limit by probabilistic method (No: 08454036), 1996–1998
- DFG, Japan-Germany Cooperative Research, Herbert Spohn (Ludwig-Maximilians-Universität), Hermann Rost (University of Heidelberg), T. Deck (University of Mannheim), 1995–1996
- JSPS, Grant-in-Aid for Scientific Research (B), Theory of stochastic processes, especially its application to statistical mechanics (No: 06452015), 1994–1996
- JSPS, Grant-in-Aid for Scientific Research, Ippan (C), Study of hydrodynamic limit via theory of stochastic processes (No: 03640207), 1991
- JSPS, Japan-U.S. Cooperative Research "Hydrodynamic limit and nonlinear stochastic partial differential equations": W.A. Woyczynski (Case Western Reserve University), Carl Mueller (Rochester University), 1992–1994

Invited Talks at Conferences, Workshops and Lectures (2010—):

1. Interface motion from stochastic systems, 2023 Spring Probability Workshop, National Taiwan University, 2023.05.05
2. On coupled KPZ equation, National Central University, Taiwan, 2023.05.02

3. Interface motion from non-gradient particle system, An informal event celebrating Jóska Fritz's 80th birthday Budapest University of Technology and Economics, zoom, 2023.04.24

4. Motion by mean curvature from nongradient Glauber-Kawasaki dynamics, Workshop on SPDEs and related fields, BIMSA, 2023.04.23

5. Coupled KPZ equation and its derivation from particle systems, Probability Seminar, Shanghai NYU, 2023.04.13

6. Interface motion from stochastic systems, P. L. Hsu Lecture, 北京大学, 2023.03.10

7. Derivation of interface motions from stochastic systems, Shinshu University, 2023.02.01

8. Boltzmann-Gibbs principle in L^p sense via Littlewood-Paley-Stein inequality, 20th workshop on Stochastic Analysis on Large Scale Interacting Systems, Nishijin Plaza, Kyushu University, zoom, 2022.12.08

9. Boltzmann-Gibbs principle in L^p sense via Littlewood-Paley-Stein inequality, 中国科学院数学与系統科学研究院应用数学研究所, 2022.11.11

10. Interface motion from stochastic systems, International Conference on Nonlinear Partial Differential Equations 2022, In Honour of Professor Hiroshi Matano's 70th Birthday, Chern Institute of Mathematics, Nankai University, zoom, 2022.10.21

11. Convergence to stationary solutions in singular quasilinear stochastic PDEs, the Durham Symposium on Stochastic Dynamics, Nonlinear Probability, and Ergodicity, Durham University,zoom, 2022.08.26

12. Hydrodynamic limit and stochastic PDEs related to interface motion, vICM overlay Conference Applied Mathematics, Imperial College London, 2022.07.12

13. Hydrodynamic limit and stochastic PDEs related to interface motion, International Congress of Mathematicians 2022, Virtual Online event, invited sectional lecture at Sections "Probability" and "Stochastic and Differential Modelling", 2022.07.12

14. KPZ limit for 1D Ginzburg-Landau model, Quantum many body system and interacting particles: in honor of the 75th birthday of Herbert Spohn, Münster, Germany, zoom, 2022.06.22

15. KPZ limit for GPV model, Conference in honor of Varadhan's 80th birthday, Jeju Shinhwa World Marriott Resort, Jeju Island of South Korea, 2022.06.16

16. Hydrodynamic limit and stochastic PDEs related to interface motion, Japan forum associated with ICM 2022, A satellite event of ICM 2022 Research Institute for Mathematical Sciences, Kyoto University, 2022.06.13

17. Mini-Course: Stochastic Analysis and its Applications, 27 Lectures, Yau Mathematical Sciences Center (清華大学 丘成桐数学科学中心), zoom, 2022.03.08–2022.06.10

18. Convergence to stationary solutions in singular quasilinear stochastic PDEs, Workshop on Interacting Particle Systems and Hydrodynamic Limits, Centre de Recherches Mathematiques (CRM), Montreal, Canada, zoom, 2022.03.23

19. Motion by mean curvature from interacting particle systems, Fractional kinetics, hydrodynamic limits and fractals, Isaac Newton Institute for Mathematical Sciences, University of Cambridge, zoom, 2022.03.23

20. Motion by mean curvature from interacting particle systems, Seminar on Stochastic Processes (SSP), Lehigh University, Bethlehem, Pennsylvania, zoom, 2022.03.18

21. Schauder estimate for quasilinear discrete PDEs of parabolic type, Waseda University 応用解析研究会, 2021.07.10

22. Stochastic PDE approach to random interfaces, four Lectures (1. Ginzburg-Landau equation and stochastic Allen-Cahn equation, 2. Stochastic motion by mean curvature, 3. Sharp interface limit without conservation, 4. Stochastic mass-conserving Allen-Cahn equation), Shinshu University, zoom, 2021.01.20, 01.27

23. Quasilinear stochastic PDE and its asymptotics in noise, International Workshop on Multiphase Flows: Analysis, Modelling and Numerics, Oxford-Waseda in Mathematics, Waseda University, zoom, 2020.12.02

24. Mini-Course: KPZ limit for interacting particle systems, Ten Lectures, Yau Mathematical Sciences Center (清華大学 丘成桐数学科学中心), zoom, 2020.11.17–12.17

25. Derivation of coupled KPZ equation from multi-species zero-range processes, Webinar on Stochastic Analysis, Chinese Academy of Science and Beijing Institute of Technology (中国科学院・北京理工大学), zoom, 2020.07.29

26. Motion by mean curvature and coupled KPZ from particle systems, Asia-Pacific Analysis and PDE Seminar, University of Sydney, zoom, 2020.05.25

27. Derivation of coupled KPZ equation from multi-species zero-range processes, 18th Symposium Stochastic Analysis on Large Scale Interacting Systems, Osaka University, 2019.11.05

28. Motion by mean curvature and coupled KPZ from particle systems, Mathematical Analysis for Biology and Ecology, ReaDiNet Conference, INRIA Nancy, 2019.09.23

29. Large deviation for lozenge tiling dynamics, Large Scale Stochastic Dynamics, Mathematisches Forschungsinstitut Oberwolfach, 2019.09.17

30. Stochastic mass-conserving Allen-Cahn equation, Seminaire-Groupe de Travail, Probabilités - Statistiques - Controle, ENSTA Paris Tech, 2019.09.12

31. Mean curvature interface limit from Glauber-Zero range interacting particles, Japanese-German Open Conference on Stochastic Analysis 2019, Fukuoka University, 2019.09.02

32. Scaling limits for random fields in two media. Gradient Flows and Related Topics: Analysis and Applications, Shiinoki Cultural Complex, Ishikawa Prefecture, 2019.08.10

33. Large deviation for lozenge tiling dynamics, The 12th MSJ Seasonal Institute "Stochastic Analysis, Random Fields and Integrable Probability", Kyushu University, 2019.07.31

34. Three different time stages in stochastic mass-conserving Allen-Cahn equation, Recent Trends in Stochastic Analysis and SPDEs, Celebrating Franco Flandoli's 60th birthday, University of Pisa, 2019.07.19

35. Sharp interface limit for stochastic Allen-Cahn equations, 2019 Spring Probability Workshop, Institute of Mathematics, Academia Sinica, Taipei, 2019.05.21

36. Derivation of coupled KPZ-Burgers equation from multi-species zero-range processes, New Directions in Stochastic Analysis: Rough Paths, SPDEs and Related Topics, On the Occasion of Professor Terry Lyons' 65th Birthday, Zuse Institute Berlin, 2019.03.19

37. Six Lectures on Stochastic PDE approach to random interfaces, Spring School on Random Interfaces Pisa-Augsburg School, University of Augsburg, Germany, 2019.03.13–03.15

38. Four Lectures on Hydrodynamic limits for stochastic systems — Interface motion and free boundary problems from interacting systems, Gran Sasso Science Institute, L'Aquila, Italy, 2019.02.25–03.08

39. Derivations of motion by mean curvature and Stefan problem from Glauber-Kawasaki dynamics, 17th workshop on Stochastic Analysis on Large Scale Interacting Systems, Kyoto University, RIMS, 2018.11.05

40. Derivation of motion by mean curvature and Stefan problem from particle systems, ReaDiNet 2018: Recent Progresses in Mathematical Theories for Biological Phenomena, Jeju, South Korea, 2018.11.01

41. Coupled KPZ equation, 2018 Probability Workshop in Gyeongju, South Korea, 2018.08.05

42. Six Lectures on Hydrodynamic limit for exclusion processes, KAIST Summer School in Probability 2018, Daejeon, South Korea, 2018.07.31–08.03

43. Derivation of coupled KPZ equation from multi-color zero-range process, Workshop on Stochastic partial differential equations and related topics, Shinshu University, 2018.07.26

44. Motion by mean curvature from Glauber-Kawasaki dynamics, 12th AIMS Conference on Dynamical Systems, Differential Equations and Applications, National Taiwan University, Special Session 16, 2018.07.08

45. Coupled KPZ (Kardar-Parisi-Zhang) equation, 12th AIMS Conference on Dynamical Systems, Differential Equations and Applications, National Taiwan University, Special Session 23, 2018.07.06

46. Motion by mean curvature from Glauber-Kawasaki dynamics, Workshop on Interplay of Random Media and Stochastic Interface Models, Technischen Universität Berlin, 2018.06.25

47. Derivation of coupled KPZ equation from multi-color zero-range processes, New York University at Shanghai, China, 2018.05.03

48. Large deviation for lozenge tiling dynamics, New York University at Shanghai, China, 2018.03.27

49. Motion by mean curvature from Glauber-Kawasaki dynamics, Scuola Normale Superiore di Pisa, Italy, 2018.03.15

50. Large deviation for lozenge tiling dynamics, Gran Sasso Science Institute, L'Aquila, Italy, 2018.03.08

51. Four Lectures on Hydrodynamic limit for exclusion processes, Gran Sasso Science Institute, L'Aquila, Italy, 2018.03.06–03.13

52. Four Lectures on Hydrodynamic limit and fluctuation limit for exclusion processes, Beijing Jiaotong University, 2018.01.29–02.01

53. Volume preserving mean curvature flow with stochastic term, International Workshop on the Multi-Phase Flow; Analysis, Modeling and Numerics, Waseda University, 2017.12.01

54. A stochastically perturbed volume preserving mean curvature motion, Workshop on ReaDiNet 2017: International Conference on Mathematical Biology, National Taiwan University, 2017.10.14

55. Stochastic motion by mean curvature, Beijing Jiaotong University, 2017.09.20

56. Single and coupled KPZ equations (北京大学海外名家講義), Beijing University (北京大学 数学科学学院), 2017.09.13, 09.15

57. Three Lectures on 1. KPZ equation, 2. SPDEs, basic notion and facts and 3. coupled KPZ equation, Henan University (河南大学 金明校区), 開封, 2017.08.07, 08.08 and 08.10

58. East Lake Lectures on 1. Stochastic motion by mean curvature and 2. Sharp interface limit for stochastic Allen-Cahn equation, Center for Mathematical Sciences, Huazhong University of Science and Technology, Wuhan, 2017.08.02, 08.03

59. Invariant measures in coupled KPZ equations, Stochastic dynamics out of equilibrium, Institut Henri Poincaré, Paris, 2017.06.14

60. Several problems in stochastic analysis motivated by statistical physics, 10th Colloquium of Mathematics and Applied Mathematics, Waseda University, 2017.04.27

61. KPP, KPZ and nonlinear fluctuations in stochastic dynamics, Reaction-diffusion system, theory and applications, Meiji University, 2017.03.19

62. KPZ, nonlinear fluctuations in 2D stochastic dynamics, Probability seminar, Technische Universität Berlin, 2017.03.03

63. KPZ, nonlinear fluctuations in Glauber-Kawasaki dynamics, Stochastic Analysis Day, University of Pisa, 2017.02.27

64. KPZ, nonlinear fluctuations in Glauber-Kawasaki dynamics, Kickoff Meeting for Stochastic Analysis on Infinite Particle Systems, Kyushu University, 2017.01.24

65. On stochastic partial differential equations, especially KPZ equation, 6th Hirosaki nonlinear PDE meeting, Hirosaki University, 2016.12.23

66. On stochastic partial differential equations, especially KPZ equation, Waseda University 応用解析研究会, 2016.11.26

67. Coupled KPZ equation, Large Scale Stochastic Dynamics, Mathematisches Forschungsinstitut Oberwolfach, 2016.11.14

68. Sharp interface limit for a stochastically perturbed mass conserving Allen-Cahn equation, International Workshop on the Multi-Phase Flow; Analysis, Modeling and Numerics, Waseda University, 2016.11.09

69. Sharp interface limit for a stochastically perturbed mass conserving Allen-Cahn equation, Stochastic Partial Differential Equations and Related Fields, Bielefeld University, 2016.10.13

70. Sharp interface limit for stochastic Allen-Cahn equation, ReaDiNet 2016, Reaction-Diffusion Systems in Mathematics and Biomedicine, Villa Clythia, Frejus, Cote d'Azur, 2016.09.20

71. A coupled KPZ equation, Workshop on Stochastic Processes, in honour of Erwin Bolthausen's 70th birthday, Institut für Mathematik, Universität Zürich, 2016.09.16

72. Two approximations of coupled KPZ equations, The 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting (IMS-APRM), The Chinese University of Hong Kong, 2016.06.29.

73. Coupled KPZ equation, Stochastic Partial Differential Equations and Applications - X, Levico Terme (Trento), Italy, 2016.06.02

74. Coupled KPZ equation and its two types of approximations, Probabilistic models - from discrete to continuous, University of Warwick, UK, 2016.03.29

75. Coupled KPZ equation, Ceremade, University of Paris at Dauphine, France, 2016.03.15

76. Stochastic motion by mean curvature and sharp interface limits, Stochastic PDE's, Large Scale Interacting Systems and Applications to Biology, University of Paris-Sud and ENSTA, France, 2016.03.10

77. Four Lectures on Topics in stochastic partial differential equations, UK-Japan Winter School "Classic and Stochastic Geometric Mechanics", Imperial College London, 2016.01.04–01.07

78. Coupled KPZ equations, Current Topics in Mathematical Physics and Probability, Tsinghua Sanya International Mathematics Forum (Yau Institute), Hainan Island (海南島), China, 2015.12.27

79. Some Topics in Stochastic Partial Differential Equations, Kiyosi Itô's Legacy from a French-Japanese Perspective, Conference in celebration of the centennial of the birth of Kiyosi Itô, French embassy in Tokyo, 2015.11.26

80. Approach to statistical physics via probability theory, 20th Kubo memorial symposium: Mathematical Sciences around non-equilibrium, Gakushi Kaikan (学士会館), Tokyo, 2015.10.03

81. Scaling limits for random fields with a pinning effect, Stochastic Analysis, Kyoto University RIMS, 2015.09.07

82. Motion of interfaces and stochastic partial differential equations, NLPDE Seminar, Kyoto University, 2015.07.03

83. Five Lectures on Topics in random interfaces, 3rd NIMS Summer School in Probability, NIMS, Daejeon, South Korea, 2015.06.15–06.19

84. Scaling limits for weakly pinned Gaussian random fields under the presence of two possible candidates, Progress in Nonequilibrium Statistical Mechanics, University of Nice, France, 2015.06.09

85. KPZ equation and its invariant measures, math physics/probability seminar, University of Arizona, USA, 2015.04.01

86. Stochastic PDEs and random motion of fronts, Mathematics Colloquium, University of Arizona, USA, 2015.03.26

87. Mathematical approach connecting the microscopic with the macroscopic, AIMR International Symposium 2015 "A new horizon for materials science with mathematics collaboration", Sendai International Center, 2015.02.16

88. Scaling limits for weakly pinned Gaussian random fields under the presence of two possible candidates, Problems in Infinite Particle Systems and Random Fields X, Yokohama Information and Culture Center, 2014.11.30

89. Choosing a proper minimizer of a certain variational problem from microscopic viewpoint, International Conference on Mathematical Fluid Dynamics, Present and Future, Waseda University, 2014.11.12

90. KPZ equation, its renormalization and invariant measures, Interface fluctuations and KPZ universality class, Yukawa Institute for Theoretical Physics, Kyoto University, 2014.08.22

91. To choose a proper minimizer of variational problem derived from microscopic system, Miniworkshop on Mathematical Biology, Université de Paris-Sud, France, 2014.06.06

92. Sharp interface limit for mass conserving Allen-Cahn equation with stochastic term, Mathematics and its applications to complex phenomena arising in biology, chemistry and medicine, CIRM, Luminy, France, 2014.06.04

93. KPZ equation, its renormalization and invariant measures, SPDEs and Applications IX, Levico, Italy, 2014.01.10

94. KPZ equation, its renormalization and invariant measures National Central University, Taiwan, 2013.12.06

95. Kardar-Parisi-Zhang equation and its approximation, Mathematical Analysis of Incompressible Viscous Fluid, Kyoto University RIMS, 2013.11.25

96. KPZ equation, its renormalization and invariant measures, Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, 2013.11.23

97. KPZ equation, its renormalization and invariant measures, Mathematisches Forschungsinstitut Oberwolfach, Germany, 2013.10.30

98. Invariant measures for a linear stochastic heat equation related to the KPZ equation, 36th Conference Stochastic Processes and Applications, University of Colorado Boulder, 2013.08.01

99. Invariant measures for a linear stochastic heat equation related to the KPZ equation, The workshop "Entropy and Nonequilibrium Dynamics",Budapest, Hungary, 2013.05.24

100. Invariant measures for a linear stochastic heat equation related to the KPZ equation, Perspectives in Analysis and Probability - Opening Conference,Lebesgue Center of Mathematics, University of Rennes, France, 2013.04.11

101. Derivation of a cross-diffusion system from a microscopic model, Miniworkshop on nonlinear analysis and mathematical biology, Complexe d'Accueil du CNRS de Gif-sur-Yvette, France, 2013.04.05

102. Invariant measure for linear stochastic heat equation related to the KPZ equation, Grupo de Física Matemática da Universidade de Lisboa, Portugal, 2013.01.08

103. Hydrodynamic derivation of a cross-diffusion system describing self-organized aggregation from a model with micro and mesoscopic components, Singularities arising in nonlinear problems, Kansai Seminar House, 2012.11.25

104. Hydrodynamic limit for a model of self-organized aggregation, Problems in Infinite Particle Systems and Random Fields VIII, Nara Women's University, 2012.10.21

105. Invariant measures of a stochastic heat equation related to the KPZ equation, Chinese Academy of Science (中国科学院), 2012.09.25

106. Hydrodynamic limit for a multi-species system producing a self-organized aggregation, Beijing University (北京大学数学科学学院), Colloquium, 2012.09.21

107. Two Lectures on Some topics in stochastic partial differential equations, Beijing University (北京大学数学科学学院), 2012.09.20, 09.24

108. Stationary measures of the KPZ equation for growing interfaces with fluctuations, Nonlinear Partial Differential Equations, Dynamical Systems and Their Applications – in honor of Professor Hiroshi Matano on the occasion of his 60th birthday, Kyoto University RIMS, 2012.09.05

109. Invariant measure for stochastic PDE related to the KPZ equation, Random Media II, CREST, WPI-AIMR, Tohoku University, 2012.09.03

110. Hydrodynamic limit for a model of self-organized aggregation, Research Group "Stochastic Dynamics: Mathematical Theory and Applications", ZiF, Bielefeld University, 2012.08.01

111. Invariant measure for linear stochastic heat equation, 11th workshop on Stochastic Analysis on Large Scale Interacting Systems, University of Tokyo, 2012.07.06

112. Invariant measure for SPDE related to the KPZ equation, Workshop in honor of Herbert Spohn and 11th Probability Day Erlangen-München, Zentrum Mathematik Der Technischen Universität München, 2012.06.29

113. Motion of fronts under noise, PDE's with Random Terms, Echigo-Yuzawa Grand Hotel, 2012.06.20

114. Viewpoint of stochastic analysis in differential equations, Summer School "Fluctuation and Differential Equations", University of Tokyo, 2012.06.16

115. Invariant measure for SPDE related to the KPZ equation, Large Scale Behaviour of Random Spatial Models, University of Warwick, UK, 2012.05.29

116. Invariant measure for SPDE related to the KPZ equation, Workshop 1 "Stochastic Dynamics in Action, ZiF, Bielefeld University, Germany, 2012.05.21

117. Invariance of geometric Brownian motion for the stochastic heat equation related to the KPZ equation, Mathematical Physics and Stochastic Analysis, Shonan International Village Center, 2012.03.12

118. Hydrodynamic limits for large scale interacting systems, Mathematics for Innovation: Large and Complex Systems, ESF-JSPS Frontier Science Conference Series for Young Researchers, The Four Seasons Hotel Tokyo at Chinzan-so, Tokyo, 2012.03.01

119. Invariant measure for a linear stochastic heat equation, Problems in Infinite Particle Systems and Random Fields VII, Nara Women's University, 2011.10.15

120. Interfaces in a stochastic reaction-diffusion equation and an evolutional model of Young diagrams, Reaction-Diffusion Systems in Mathematics and the Life Sciences, Université de Montpellier 2, 2011.09.21

121. Reaction-diffusion equations with random terms and their singular limits, Mathematics and biology: A ReaDiLab Seminar Day, University Paris-Diderot, IJM, 2011.09.13

122. Time evolution of Young tableau and scaling limit, Colloquium, Shinshu University, 2011.07.21

123. Scaling limits for dynamic models of 2D Young diagrams, Conference in Honor of the 70th Birthday of S.R. Srinivasa Varadhan, National Taiwan University, 2011.07.12

124. Scaling limits for dynamic models of Young diagrams, Gradient Random Fields, Banff International Research Station for Mathematical Innovation and Discovery (BIRS), Canada, 2011.06.01

125. Non-equilibrium fluctuations for an evolutional model of 2D Young diagrams, Stochastic Partial Differential Equations and Related Topics, Nankai University, Chern Institute of Mathematics (南開大学, 陳研究所), 2011.04.25

126. An evolutional model of Young diagrams with conservation law, Workshop on the Fourier Law and Related Topics, Fields Institute, Canada, 2011.04.08

127. An evolutional model of Young diagrams with conservation law, Institute of Mathematics, Academia Sinica, Taipei, 2011.03.10

128. Hydrodynamic limit for interacting systems: lattice gases and interface models, Institute of Mathematics, Academia Sinica, Taipei, 2011.03.07

129. Five Lectures on Introduction to the theory of stochastic differential equations and stochastic partial differential equations, Fluid Mathematics Special Lecture, Waseda University, 2010.11.26, 12.03 and 12.10

130. Scaling limits for a dynamic model of Young diagrams, IRTG Darmstadt-Tokyo seminar, Technische Universität Darmstadt, 2010.11.18

131. Scaling limits for the interface models and derivation of nonlinear PDEs, Mathematical Colloquium, Technische Universität Darmstadt, 2010.11.17

132. Hydrodynamic limit for 2D and 3D Young diagrams, Large Scale Stochastic Dynamics, Mathematisches Forschungsinstitut Oberwolfach, 2010.11.10

133. Five Lectures on Scaling limit of dynamic model of Young diagrams, Kyushu University, 2010.11.01–11.05

134. Hydrodynamic limit for 2D and 3D Young diagrams, Workshop on Probabilistic Techniques in Statistical Mechanics, celebrating the 65th birthday of Erwin Bolthausen, TU Berlin, Germany, 2010.10.14

135. Hydrodynamic limit for a dynamic model of 2D Young diagrams, 5th Pacific Rim Conference on Mathematics, Stanford University, USA, 2010.07.01

136. Hydrodynamic limit for a dynamic model of 2D Young diagrams, University of Paris 6 and 7, France, 2010.05.04

137. Hydrodynamic limit for a dynamic model of 2D Young diagrams, Seminar at Groupe de travail "Applications des Mathématiques" ENS Cachan Bretagne, Rennes, France, 2010.04.28

138. Scaling limits for microscopic interface models, Séminaire de Calcul Scientifique du CERMICS, Écoles de Ponts Paris Tech, France, 2010.04.22

139. Brascamp-Lieb inequality and its applications to Wiener integrals for centered Bessel processes, Welsh Probability Seminar, Swansea University, UK, 2010.03.05

140. Brascamp-Lieb inequality and its applications to Wiener integrals for centered Bessel processes, School of Mathematics, Loughborough University, UK, 2010.02.25

141. Hydrodynamic limit for surface diffusion in 2D Young diagrams, Probability Forum, Warwick University, 2010.02.24

142. Brascamp-Lieb inequality and Wiener integrals for centered Bessel processes, Isaac Newton Institute for Mathematical Sciences, University of Cambridge, 2010.02.23

143. Scaling limits for a dynamic model of 2D Young diagrams, The First CREST-SBM International Conference "Random Media", Sendai International Center, 2010.01.26

144. Hydrodynamic limit for a dynamic model of two dimensional Young diagrams, Colloquium, Kyoto University, 2010.01.20

145. Lectures on Hydrodynamic limit for interface model via 2-scale method, Kyoto University, 2010.01.18–01.22.

146. Scaling limits for a dynamic model of 2D Young diagrams, Opening Workshop: Stochastic Partial Differential Equations, Isaac Newton Institute for Mathematical Sciences, University of Cambridge, 2010.01.04

List of Publications:

Articles

[1] T. Funaki, Construction of a solution of random transport equation with boundary condition. J. Math. Soc. Japan, **31** (1979), 719–744.

[2] A. Inoue and T. Funaki, On a new derivation of the Navier-Stokes equation. Commun. Math. Phys., **65** (1979), 83–90.

[3] T. Funaki, Probabilistic construction of the solution of some higher order parabolic differential equation. Proc. Japan Acad., **55 (A)** (1979), 176–179.

[4] T. Funaki, Random motion of strings and related stochastic evolution equations. Nagoya Math. J., **89** (1983), 129–193.

[5] T. Funaki, The diffusion approximation of the Boltzmann equation of Maxwellian molecules. Publ. RIMS Kyoto Univ., **19** (1983), 841–886.

[6] T. Funaki, Random motion of strings and stochastic differential equations on the space $C([0,1], \mathbb{R}^d)$. Proc. Taniguchi Intern. Symp. on Stochastic Analysis (1982), edited by K. Itô, 1984, 121–133.

[7] T. Funaki, A certain class of diffusion processes associated with nonlinear parabolic equations. Z. Wahrscheinlichkeitstheorie verw. Gebiete, **67** (1984), 331–348.

[8] T. Funaki, The diffusion approximation of the spatially homogeneous Boltzmann equation. Duke Math. J., **52** (1985), 1–23.

[9] T. Funaki, Construction of stochastic processes associated with the Boltzmann equation and its applications. Proc. 15th SPA, Nagoya, edited by K. Itô & T. Hida, Lect. Note in Math., **1203**, Springer-Verlag (1986), 51–65.

[10] T. Funaki, The central limit theorem for the spatially homogeneous Boltzmann equation. Prob. Methods Math. Phys., Proc. Taniguchi Symp. (1985), edited by K. Itô & N. Ikeda, 1987, 91–111.

[11] T. Funaki, On diffusive motion of closed curves. Probability Theory and Mathematical Statistics, edited by S. Watanabe & Yu.V. Prokhorov, Lect. Note in Math., **1299**, Springer-Verlag (1988), 86–94.

[12] T. Funaki, The hydrodynamical limit for scalar Ginzburg-Landau model on $\mathbb{R}$. Stochastic Analysis, Proceedings, Paris 1987, edited by M. Métivier & S. Watanabe, Lect. Note in Math., **1322**, Springer-Verlag (1988), 28–36.

[13] T. Funaki, Derivation of the hydrodynamical equation for one-dimensional Ginzburg-Landau model. Probab. Theory Relat. Fields, **82** (1989), 39–93.

[14] T. Funaki, 流体力学極限 —— 局所平衡状態の統計力学 (Hydrodynamic limit —— Statistical mechanics of local equilibrium states). 数学 (Sûgaku), **41** (1989), 166–176.

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[16] T. Funaki, K. Handa and K. Uchiyama, Hydrodynamic limit of one-dimensional exclusion processes with speed change. Ann. Probab., **19** (1991), 245–265.

[17] T. Funaki, The reversible measures of multi-dimensional Ginzburg-Landau type continuum model. Osaka J. Math., **28** (1991), 463–494.

[18] T. Funaki, Regularity properties for stochastic partial differential equations of parabolic type. Osaka J. Math., **28** (1991), 495–516.

[19] T. Funaki, The hydrodynamic limit for a system with interactions prescribed by Ginzburg-Landau type random Hamiltonian. Probab. Theory Relat. Fields, **90** (1991), 519–562.

[20] T. Funaki, On the stochastic partial differential equations of Ginzburg-Landau type. In the Proceedings of the Conference on SPDE's and Their Applications, Lecture Notes in Control and Information Sciences **176** (1992), 113–122, Springer.

[21] T. Funaki, A stochastic partial differential equation with values in a manifold. J. Funct. Anal., **109** (1992), 257–288.

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[28] T. Funaki, Equilibrium fluctuations for lattice gas. Itô's Stochastic Calculus and Probability Theory, edited by Ikeda, Watanabe, Fukushima & Kunita, Springer, 1996, 63–72.

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