# Anton Dzhamay — *Curriculum Vitae*



*Image courtesy of Anton Betten (CSU)*

## Contact Information

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## Employment History

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| 2023–present | **Visiting Research Fellow**, *Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)*, Beijing, P.R.China |
| 2016–present | **Professor and Graduate Faculty**, *School of Mathematical Sciences, University of Northern Colorado*, Greeley, CO |
| Spring 2020 | **Visiting Professor**, *Skoltech Center for Advanced Studies, Skoltech*, Moscow, Russia |
| Fall 2019 | **Visiting Professor**, *Department of Mathematics, Shanghai University*, Shanghai, P.R.China |
| 2011–2016 | **Associate Professor**, *School of Mathematical Sciences, University of Northern Colorado*, Greeley, CO |
| Summer 2014 | **Visiting Scholar**, *School of Mathematics and Statistics, University of Sydney*, Sydney, NSW, Australia |
| Spring 2013 | **Visiting Professor**, *Department of Mathematics, Columbia University*, New York, NY |
| 2005–2011 | **Assistant Professor**, *School of Mathematical Sciences, University of Northern Colorado*, Greeley, CO |
| 2004–2005 | **Ritt Assistant Professor**, *Department of Mathematics, Columbia University*, New York, NY |
| 2000–2004 | **Post-doc Assistant Professor**, *Department of Mathematics, University of Michigan*, Ann Arbor, MI |

## Education

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| 2000 | **Ph.D.**, *(Mathematics), Columbia University*, New York, **Thesis Advisor**: Professor *Igor Krichever* |
| 1997 | **M.Phil.**, *(Mathematics), Columbia University*, New York |
| 1994 | **M.A.**, *(Mathematics), Columbia University*, New York |
| 1993 | **Diplom (Honors)**, *(Appl. Mathematics), Moscow Institute of Electronics and Mathematics*, Moscow, Russia |

## Research Interests

Continuous and discrete integrable systems, isomonodromic deformations, continuous and discrete Painlevé equations, orthogonal polynomials and special functions, integrable hierarchies and soliton equations, algebraic geometry, mathematical physics.

## Professional Activities

**Referee**: *International Mathematics Research Notices*; *Journal of Integrable Systems*; *Journal of Mathematical Physics*; *Journal of Nonlinear Mathematical Physics*; *Journal of Physics A: Mathematical and Theoretical*; *Mathematical Physics, Analysis, and Geometry*; *Proc. of the Royal Society A: Mathematical, Physical, and Engineering Sciences*; *Random Matrices: Theory and Applications*; *SIAM*; *SIGMA*; *Theoretical and Mathematical Physics*; *Math. Reviews.*

**Membership**: *AMS* (1993–present), *MAA* (2000–present), *SIAM* (2013–present)

## Publications

### Submitted and Preprints

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|---|---|
| 2023 | E. Trunina, A. Dzhamay *Orthogonal Polynomials for the Gaussian Weight with a Jump and Discrete Painlevé Equations*, 15 pp. (submitted) |
| 2023 | A. Dzhamay, G. Filipuk, A. Ligęza, A. Stokes *Different Hamiltonians for Differential Painlevé equations and their identification using a geometric approach*, https://arxiv.org/abs/2109.06428, 43 pp. (preprint, submitted) |
| 2022 | X. Li, A. Dzhamay, G. Filipuk, D.-J. Zhang *Recurrence relations for the generalized Laguerre and Charlier orthogonal polynomials and discrete Painlevé equations on the $D_6^{(1)}$ Sakai surface*, https://arxiv.org/abs/2202.11263, 28 pp. (preprint, in revisions) |
| 2013 | A. Dzhamay, H. Sakai, T. Takenawa, *Discrete Schlesinger Transformations, their Hamiltonian Formulation, and Difference Painlevé Equations*, http://arxiv.org/abs/1302.2972, 40 pp. (preprint, in revisions) |

### Research Papers

2022    A. Dzhamay, G. Filipuk, A. Stokes *Differential equations for the recurrence coefficients of semi-classical orthogonal polynomials and their relation to the Painlevé equations via the geometric approach*, **Studies in Applied Mathematics**, **2022**, 49 pp.

2021    A. Dzhamay, G. Filipuk, A. Ligęza, A. Stokes *Hamiltonian structure for a differential system from a modified Laguerre weight via the geometry of the modified third Painlevé equation*, **Applied Mathematics Letters 120 2021**, 107248, 7 pp.

2020    A. Dzhamay, G. Filipuk, A. Stokes *On differential systems related to generalized Meixner and deformed Laguerre orthogonal polynomials*, **Integral Transforms and Special Functions**, **32** Issues 5–8, **2021** 7 pp.

2020    A. Dzhamay, G. Filipuk, A. Stokes *Recurrence coefficients for discrete orthogonal polynomials with hypergeometric weight and discrete Painlevé equations*, **J. Phys. A: Math. Theor. 53 2020**, 495201, 29 pp.

2020    J. Hu, A. Dzhamay, Y. Chen *Gap Probabilities in the Laguerre Unitary Ensemble and discrete Painlevé equations*, **J. Phys. A: Math. Theor. 53 2020**, 354003, 18 pp.

2019    A. Dzhamay, A. Knizel, *q-Racah ensemble and $q\text{-}P\left(E_7^{(1)}/A_1^{(1)}\right)$ Discrete Painlevé equation*, **Int. Math. Res. Not. IMRN**, vol. **2019**, ID: rnz211, 47 pp.

2018    A. Dzhamay, T. Takenawa, *On Some Applications of Sakai's Geometric Theory of Discrete Painlevé equations*, **SIGMA 14 2018**, 075, 20 pp.

2017    A. S. Carstea, A. Dzhamay, T. Takenawa, *Fiber-dependent deautonomization of integrable 2D mappings and discrete Painlevé equations*, **J. Phys. A: Math. Theor. 50 2017**, 41 pp.

2015    A. Dzhamay, T. Takenawa, *Geometric Analysis of Reductions from Schlesinger Transformations to Difference Painlevé Equations*, **AMS Cont. Math.**, **vol. 651**, **2015**, 38 pp.

2013    A. Dzhamay, *Combinatorics of Matrix Factorizations and Integrable Systems*, special issue on *The Geometry of the Painlevé Equations* of **Journal of Nonlin. Math. Phys.**, **vol. 20 (2013)** Suppl. 1, 14 pp.

2009    A. Dzhamay, *Factorizations of rational matrix functions with application to discrete isomonodromic transformations and difference Painlevé equations*, **J. Phys. A: Math. Theor.**, vol. **42**, **2009**, ID: 454008, 10 pp.

2008    A. Dzhamay, *On the Lagrangian Structure of the Discrete Isospectral and Isomonodromic Transformations*, **Int. Math. Res. Not. IMRN**, vol. **2008**, ID: rnn102, 22 pp.

2000    A. Dzhamay, *Real-normalized Whitham hierarchies and the WDVV equations*, **Int. Math. Res. Not. IMRN**, vol. **2000**, **21** pp. 1103–1130

1994    A. Dzhamay, E. Vorob'ev *Infinitesimal weak symmetries of non-linear differential equations in two independent variables*, **J. Phys. A: Math. Gen.**, vol. **27**, **1994** pp. 5541–5549

### Books

2015    A. Dzhamay, K. Maruno, C. Ormerod (editors), *Algebraic and Analytic Aspects of Integrable Systems and Painlevé Equations*, **AMS Cont. Math.**, **vol. 651**, **2015**, 194 pp.

2015    C. Curtis, A. Dzhamay, W. Hereman, B. Prinari (editors), *Nonlinear Wave Equations: Analytic and Computational Techniques*, **AMS Cont. Math.**, **vol. 635**, **2015**, 210 pp.

2013    A. Dzhamay, K. Maruno, V. Pierce (editors), *Algebraic and Geometric Aspects of Integrable Systems and Random Matrices*, **AMS Cont. Math.**, **vol. 593**, **2013**, 345 pp.

### Proceedings

2021    A. Dzhamay, G. Filipuk, A. Ligęza, A. Stokes *On Hamiltonians related to the second Painlevé Equation*, *Proceedings of the* **Contemporary Mathematics in Kielce 2020** *Conference*, **2021** 12 pp.

2016    A. Dzhamay, T. Takenawa, *Schlesinger Transformations and Difference Painlevé Equations*, Proceedings of the **FNP International Conference**, 2 pp.

## Professional Presentations

### Conference Talks (invited & juried)

December 2022    6$^{\text{th}}$ Virtual International Workshop on *Integrable Systems* (online), *Gap probabilities in the Laguerre unitary ensemble and discrete Painlevé equations,* organized by The China University of Mining and Technology (China), the University of Texas Rio Grande Valley (USA), and the Michoacan University of San Nicolás of Hidalgo (Mexico)

July 2022    *SciCA∂E 2022* International Conference on *Scientific Computation and Difference Equations, Recurrence relations for the generalized Laguerre and Charlier orthogonal polynomials and discrete Painlevé equations on the $D_6^{(1)}$ Sakai surface,* The University of Iceland, Reykjavik, Iceland

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| June 2022 | 6<sup>th</sup> Virtual Workshop on *Nonlinear and Modern Mathematical Physics* (online), *Discrete orthogonal polynomials and discrete Painlevé equations,* Florida A&M University, Tallahassee, FL, USA |
| June 2022 | 16<sup>th</sup> International Symposium on *Orthogonal Polynomials, Special Functions, and Applications* (online), *Recurrence relations for the generalized Laguerre and Charlier orthogonal polynomials and discrete Painlevé equations on the* $D_6^{(1)}$ *Sakai surface,* Centre de Recherches Mathématiques, Université de Montréal, Montreal, QB, Canada |
| May 2022 | *Random Matrix EurAsia 2022* International Workshop (online), *Orthogonal polynomials and discrete Painlevé equations,* Institute for Mathematical Sciences, National University of Singapore, Singapore |
| April 2022 | *Colorado Nonlinear Day* Conference, *Different Hamiltonians for Painlevé Equations and Their Identification using Geometry of the Space of Initial Conditionss,* The University of Colorado, Colorado Spring, CO, USA |
| November 2021 | 4<sup>th</sup> Annual Meeting of the SIAM Texas-Louisiana Section, Minisymposium on *Applications of Algebra in Mathematical Physics and Integrable Systems* (online), University of Texas – Rio Grande Valley, *Different Hamiltonians for Painlevé Equations and Their Identification using Geometry of the Space of Initial Conditions* South Padre Island, TX, USA |
| October 2021 | 3<sup>rd</sup> International Conference on *Integrable Systems & Nonlinear Dynamics* (online), *Different Hamiltonians for Painlevé Equations and Their Identification using Geometry of the Space of Initial Conditions* Yaroslavl, Russia |
| January 2020 | *Joint Mathematics Meeting, Recurrence coefficients for discrete orthogonal polynomials with hypergeometric weight and discrete Painlevé equations* Denver, CO, USA |
| August 2019 | *Solitons, Collapses and Turbulence (SCT-19)* IX<sup>th</sup> International Conference, *Discrete Painlevé Equations in Tiling Problems,* Yaroslavl, Russia |
| July 2019 | *Orthogonal Polynomials, Special Functions, and Functional Equations (OPSFA 2019)* 15<sup>th</sup> International Symposium, *Discrete Painlevé Equations in Tiling Problems,* Hagenberg, Austria |
| July 2019 | *ICIAM 2019* International Congress on Industrial and Applied Mathematics, *Discrete Painlevé Equations in Tiling Problems,* Valencia, Spain |
| July 2019 | *ISQS-26 Integrable Systems and Quantum Symmetries* International Conference, *Discrete Painlevé Equations in Tiling Problems,* Prague, Czech Republic |
| June 2019 | *Integrable Systems, Special Functions and Combinatorics (Island V)* International Conference, *Discrete Painlevé Equations in Tiling Models,* Sabhal Mòr Ostaig, the Gaelic College, the Isle of Skye, Scotland, UK |
| May 2019 | *The 2nd JNMP Conference on Nonlinear Mathematical Physics* International Conference, *Two-point Discrete Schlesinger Transformations of Arbitrary Rank and their Discrete Hamiltonians,* Santiago, Chile |
| April 2019 | *IMACS-11* International Conference, *Discrete Painlevé Equations in Tiling Models,* University of Georgia, Athens, GA, USA |
| November 2018 | *Symmetries and Integrability of Difference Equations (SIDE-13)* International Conference, *Gap probabilities in tiling models and discrete Painlevé equations,* Fukuoka, Japan |
| October 2018 | *AMS Fall Central Sectional Meeting, Gap Probabilities in tiling models and discrete Painlevé equations,* The University of Michigan, Ann Arbor, MI, USA |
| September 2018 | *Tau Functions of Integrable Systems and Their Applications (18w5025)* International Workshop, *Gap Probabilities in q-Racah and q-Hahn tiling models and discrete Painlevé equations,* BIRS, Banff, Canada |
| July 2018 | *AIMS-2018* International Conference, *Gap Probabilities in q-Racah and q-Hahn tiling models and discrete Painlevé equations,* NCTS and NTU, Taipei, Taiwan |
| January 2018 | *Joint Mathematics Meeting, Gap Probabilities in q-Racah tiling model and discrete Painlevé equations,* San Diego, WA, USA |
| December 2017 | *Contemporary Mathematics* International Conference, *Geometric Deautonomization of QRT Maps and Discrete Painlevé Equations,* Moscow, Russia |
| November 2017 | *Colorado Nonlinear Day* Conference, *Geometric Deautonomization of QRT Maps and Discrete Painlevé Equations,* The University of Colorado, Colorado Spring, CO, USA |
| August 2017 | *Painlevé Equations and Applications* Workshop, *Geometry of Discrete Painlevé Equations and Applications,* The University of Michigan, Ann Arbor, MI, USA |
| June 2017 | *Physics and Mathematics of Nonlinear Phenomena PNMP-2017* International Conference, *Geometric Deautonomization and Discrete Painlevé Equations,* Gallipoli, Italy |
| June 2017 | *ISQS-25 Integrable Systems and Quantum Symmetries* International Conference, *Geometric Deautonomization of a QRT Mapping and Elliptic Difference Painlevé Equations,* Prague, Czech Republic |
| March 2017 | *IMACS-10* International Conference, *Rational Mapping Factorization and Elliptic Difference Painlevé Equations,* University of Georgia, Athens, GA, USA |
| December 2016 | *Discrete Mathematical Modeling* Workshop, *Factorization of Rational Mappings and Geometric Deautonomization,* The University of Tokyo Graduate School, Tokyo, Japan |

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| October 2016 | *AMS Fall Western Sectional Meeting, Geometric Deautonomization and Elliptic Difference PainlevÉquations with Special Symmetry Groups,* The University of Denver, Denver, CO, USA |
| July 2016 | *FNP-2016 Frontiers of Nonlinear Physics* International Conference, *Schlesinger Transformations and Difference Painlevé Equations,* Nizhny Novgorod – St. Petersburg, Russia |
| July 2016 | *Symmetries and Integrability of Difference Equations (SIDE-12)* International Conference, *On the Geometry of Discrete Painlevé equations of type $A_2^{(1)*}$,* Saint-Adéle, QB, Canada |
| April 2016 | *Colorado Nonlinear Day* Conference, *On the Geometry of Difference Painlevé Equations,* The University of Colorado, Colorado Spring, CO, USA |
| April 2016 | *Discrete Integrable Systems* Workshop, *Higher-Rank Two-Point Schlesinger Transformations and their Hamiltonian Structure,* Tsingua University Sanya International Mathematics Forum, Sanya, P.R. China |
| January 2016 | *Moduli Spaces, Integrable Systems, and Topological Recursions* International Workshop, *On the Geometry of Difference Painlevé Equations,* CRM, University of Montreal, Montreal, Canada |
| January 2016 | *Joint Mathematics Meeting, On the Geometry of Difference Painlevé Equations,* Seattle, WA, USA |
| August 2015 | *Theory of Integrable Systems and Its Applications in Various Fields* RIMS Workshop, *Geometric Analysis of Reductions from Schlesinger Transformations to Difference Painlevé Equations,* RIMS, Kyoto University, Kyoto, Japan |
| August 2015 | *ICIAM 2015* International Congress on Industrial and Applied Mathematics, *Painlevé Equations and the Isomonodromy,* China National Convention Center, Beijing, P.R.China |
| August 2015 | *Computational and Geometric Approaches for Nonlinear Phenomena* Workshop, *Higher-rank Schlesinger Transformations and Difference Painlevé Equations,* Waseda University, Tokyo, Japan |
| May 2015 | *NEEDS-15* International Conference, *Higher-rank Schlesinger Transformations and Difference Painlevé Equations,* Santa Margherita di Pula, Sardinia, Italy |
| April 2015 | *IMACS-9* International Conference, *Higher-rank Schlesinger transformations and Difference Painlevé Equations,* University of Georgia, Athens, GA, USA |
| March 2015 | *Integrable Systems and Representation Theory* International Workshop, *Combinatorics of Matrix Refactorizations and Discrete Integrable Systems,* Tokyo University of Marine Science and Technology, Tokyo, Japan |
| November 2014 | *Colorado Nonlinear Day* Conference, *Discrete Schlesinger Equations and Difference Painlevé Equations,* The University of Colorado, Colorado Spring, CO, USA |
| June 2014 | *ISQS-22 Integrable Systems and Quantum Symmetries* International Conference, *Discrete Schlesinger Equations and Difference Painlevé Equations,* Prague, Czech Republic |
| June 2014 | *Symmetries and Integrability of Difference Equations (SIDE-11)* International Conference, *Discrete Schlesinger Equations and Difference Painlevé Equations,* Bangalore, India |
| January 2014 | *Joint Mathematics Meeting, Evolution Equations for the Discrete Schlesinger Dynamic and the Geometry of Discrete Painlevé Equations,* Baltimore, MD, USA |
| December 2013 | *Algebraic Methods in Theory of Differential and Difference Equations* International Conference, *On the Evolution Equations for the Discrete Schlesinger Dynamics, University of Kent,* Canterbury, UK |
| October 2013 | *Integrable Systems, Random Matrix Theory, and Combinatorics* International Conference, *Hamiltonian Description of Schlesinger Transformations and the Geometry of Discrete Painlevé Equations, University of Arizona,* Tucson, AZ, USA |
| July 2013 | *Discrete Integrable Systems* Follow-up Meeting, *Discrete Schlesinger Transformations and Difference Painlevé Equations,* Isaac Newton Institute for Mathematical Sciences, Cambridge, UK |
| June 2013 | *Physics and Mathematics of Nonlinear Phenomena PNMP-2013* International Conference, *Discrete Schlesinger Transformations and Difference Painlevé Equations,* Gallipoli, Italy |
| June 2013 | *Nonlinear Mathematical Physics: 20 Years of JNMP* International Conference, *Discrete Schlesinger Transformations and Difference Painlevé Equations,* The Sophus Lie Conference Center, Nordfjordeid, Norway |
| March 2013 | *IMACS-8* International Conference, *Discrete Schlesinger Transformations and Difference Painlevé Equations,* University of Georgia, Athens, GA, USA |
| March 2013 | *Nonlinear Equations and Complex Analysis* International Conference, *Discrete Schlesinger Transformations and Difference Painlevé Equations,* Bashkortostan, Russia |
| March 2013 | *Nonlinear and Modern Mathematical Physics* International Workshop, *Discrete Schlesinger Transformations and Difference Painlevé Equations,* University of South Florida, Tampa, FL, USA |
| December 2012 | *2012 Canadian Mathematical Society* Winter Meeting, *Discrete Hamiltonian Structure of Schlesinger Transformations,* Montreal, QB, Canada |
| July 2012 | *NEEDS-12* International Conference, *Discrete Hamiltonian Structure of Schlesinger Transformations,* Kolimvari,Crete, Greece |

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| June 2012 | *Symmetries and Integrability of Difference Equations (SIDE-10)* International Conference, *Discrete Hamiltonian Structure of Schlesinger Transformations I: The Generating Function,* Xikou, P.R.China |
| January 2012 | *Joint Mathematics Meeting,* *Combinatorics of Matrix Refactorizations and Discrete Integrable Systems,* Boston, MA, USA |
| April 2011 | *IMACS-7* International Conference, *Combinatorics of Eigenvectors of Rational Matrix Functions and Applications,* University of Georgia, Athens, GA, USA |
| December 2011 | *7th International Conference on Differential Equations and Dynamical Systems,* *Combinatorics of Eigenvectors of Rational Matrix Functions and Applications,* University of South Florida, Tampa, FL |
| June 2010 | *ISQS-19 Integrable Systems and Quantum Symmetries* International Conference, *Geometric Configurations Related to Matrix Factorizations,* Prague, Czech Republic |
| June 2010 | *Symmetries and Integrability of Difference Equations (SIDE-9)* International Conference, *Geometric Configurations Related to Matrix Factorizations,* Varna, Bulgaria |
| June 2010 | *Symmetry Plus Integrability 2010* International Conference, *Geometric Configurations Related to Matrix Factorizations,* South Padre Island, TX |
| May 2010 | *Dynamical Systems, Differential Equations, and Applications AIMS-2010* International Conference, *Spectral Curves and the Lagrangian Description of Discrete Integrable Systems,* Dresden, Germany |
| May 2010 | *Nonlinear Water Waves with Applications* NSF/CBMS Regional Conference in the Mathematical Sciences, *Spectral Curves and the Lagrangian Description of Discrete Integrable Systems,* University of Texas - Pan American, Edinburg, TX |
| April 2010 | *MAA Rocky Mountains Section* Meeting, *Geometric Configurations Related to Matrix Factorizations,* Colorado State University, Fort Collins, CO |
| January 2010 | *Joint Mathematics Meeting,* *On the Lagrangian Description of Discrete Integrable Systems,* San Francisco, CA, USA |
| July 2009 | *Nonlinear and Modern Mathematical Physics* International Workshop, *On the Factorizations of Rational Matrix Functions with Applications to Integrable Systems and Discrete Painlevé Equations,* Beijing, P.R.China |
| May 2009 | *Discrete Integrable Systems* Programme, *Coordinate Systems on the Space of Rational Matrix Functions with Applications to Discrete Integrable Systems and Difference Painlevé Equations,* Isaac Newton Institute for Mathematical Sciences, Cambridge, UK |
| March 2009 | *IMACS-6* International Conference, *On the Lagrangian Description of the Discrete Isospectral and Isomonodromic Transformations,* University of Georgia, Athens, GA, USA |
| June 2008 | *Symmetries and Integrability of Difference Equations (SIDE-8)* International Conference, *On the Lagrangian Description of the Discrete Isospectral and Isomonodromic Transformations,* Saint-Adéle, QB, Canada |

## Seminar and Colloquium Talks

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| April 2023 | *Department of Mathematics* Seminar, *Different Hamiltonians for Painlevé Equations and Their Identification using Geometry of the Space of Initial Conditions,* Shanghai University, Shanghai, P.R.China |
| March 2023 | *Mathematics Department* Colloquium, *Geometry of Discrete Integrable Systems: QRT Maps and Discrete Painlevé Equations,* Jinzhong University, Yuci, Shanxi, P.R. China |
| March 2023 | *Integrable Systems* Seminar, *Geometry of Discrete Integrable Systems: QRT Maps and Discrete Painlevé Equations,* Beijing Institute of Mathematical Sciences and Applications (BIMSA), Beijing, P.R. China |
| November 2022 | *Department of Mathematics* Colloquium, *Geometry of Discrete Integrable Systems,* University of Sherbrooke, Sherbrooke, QB, Canada |
| November 2022 | *Department of Mathematics* Colloquium, *Geometry of Discrete Integrable Systems,* University of South Florida, Tampa, FL, USA |
| November 2022 | *Mathematical Physics Seminar* Seminar, *Discrete Painlevé Equations and Orthogonal Polynomials,* University of South Florida, Tampa, FL, USA |
| August 2022 | *Discrete Mathematical Modeling* Seminar, *Different Hamiltonians for Painlevé Equations and Their Identification using Geometry of the Space of Initial Conditions,* The University of Tokyo, Tokyo, Japan |
| November 2021 | *Department of Mathematics* Colloquium, *Different Hamiltonians for Painlevé Equations and Their Identification using Geometry of the Space of Initial Conditions,* The University of Texas at Dallas, Richardson, TX, USA |
| October 2021 | *School of Mathematics Integrable Systems* Seminar (online), *Different Hamiltonians for Painlevé Equations and Their Identification using Geometry of the Space of Initial Conditions,* University of Leeds, Leeds, UK |
| March 2021 | *Center of Integrable Systems* Seminar (online), *Discrete Schlesinger Equations and Difference Painlevé Equations,* Yaroslavl State University, Yaroslavl, Russia |
| March 2021 | *Algebro-Geometric Methods in Integrable Systems and Quantum Physics* Seminar, *Differential Painlevé Equations and their Hamiltonian Form,* Moscow Institute of Physics and Technology, Dolgoprudny, Russia |

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| December 2020 | *Discrete Mathematical Modeling* Seminar (online), *Gap Probabilities in the Laguerre Unitary Ensemble and Discrete Painlevé Equations,* The University of Tokyo, Tokyo, Japan |
| March 2020 | *Center for Advanced Studies* Seminar, *Discrete Orthogonal Polynomials and Discrete Painlevé Equations,* Higher School of Economics and Skoltech Center for Advanced Studies, Moscow, Russia |
| February 2020 | *Algebro-Geometric Methods in Integrable Systems and Quantum Physics* Seminar, *Birational Representations of some Affine Weyl Groups and Discrete Painlevé Equations,* Moscow Institute of Physics and Technology, Dolgoprudny, Russia |
| February 2020 | *Topological Methods in Dynamics* Seminar, *Discrete Orthogonal Polynomials and Discrete Painlevé Equations,* Higher School of Economics, Nizhny Novgorod, Russia |
| January 2020 | *Department of Mathematics* Analysis Seminar, *Discrete Painlevé Equations and Orthogonal Polynomials,* The University of Arizona, Tucson, AZ, USA |
| December 2019 | *Department of Applied Mathematics* Integrable Systems Seminar, *Discrete Painlevé Equations and Orthogonal Polynomials,* Waseda University, Tokyo, Japan |
| December 2019 | *Department of Applied Mathematics* Integrable Systems Seminar, *Tutorial: Geometry of Discrete Painlevé Equations: An Introduction to Sakai's Theory,* Waseda University, Tokyo, Japan |
| November 2019 | *Department of Mathematics* Seminar, *Discrete Painlevé Equations and Applications,* Shanghai University, Shanghai, P.R.China |
| November 2019 | *Department of Mathematics* Seminar, *Geometry of Discrete Integrable Systems,* Northwest University, Xi'an, P.R.China |
| October 2019 | *Department of Mathematics* Seminar, *Recurrence coefficients for discrete orthogonal polynomials with hypergeometric weight and discrete Painlevé equations,* The University of Macau, Macau, P.R.China |
| October 2019 | *Department of Mathematics* Seminar, *Geometry of Discrete Integrable Systems,* The University of Macau, Macau, P.R.China |
| October 2019 | *Department of Mathematics* Seminar, *Recurrence coefficients for discrete orthogonal polynomials with hypergeometric weight and discrete Painlevé equations,* Shanghai Jiaotong University, Shanghai, P.R.China |
| October 2019 | *School of Science Department of Mathematics* Seminar, *Geometry of Discrete Integrable Systems,* Zhejiang University of Science and Technology, Zhejiang, P.R.China |
| October 2019 | *Discrete Mathematical Modeling* Seminar, *Recurrence coefficients for discrete orthogonal polynomials with hypergeometric weight and discrete Painlevé equations,* The University of Tokyo, Tokyo, Japan |
| August 2019 | *Department of Mathematics* Geometry and Dynamical Systems Seminar (Polish Mathematical Society Lecture), *Geometry of Discrete Integrable Systems,* The University of Warmia and Mazury, Olsztyn, Poland |
| April 2019 | *Department of Mathematics* Kempner Colloquium, *Geometry of Discrete Integrable Systems,* The University of Colorado, Boulder, CO, USA |
| November 2018 | *Mathematical Physics and Harmonic Analysis* Seminar, *Geometry of Discrete Integrable Systems,* Texas A&M University, College Station, TX, USA |
| September 2018 | *Department of Mathematics* Colloquium, *Geometry of Discrete Integrable Systems,* College of Charleston, Charleston, SC, USA |
| August 2018 | *Integrable Systems* Seminar, *Gap Probabilities in tiling models and discrete Painlevé equations,* University College, London, UK |
| August 2018 | *Center for Advanced Studies* Seminar, *Gap Probabilities in tiling models and discrete Painlevé equations,* Higher School of Economics and Skoltech Center for Advanced Studies, Moscow, Russia |
| July 2018 | *Integrable Systems* Seminar, *Gap Probabilities in q-Racah and q-Hahn tiling models and discrete Painlevé equations,* Aoyama Gakuin University, Kanagawa Perfecture, Japan |
| June 2018 | *K. Maruno's Research Group* Seminar, *Geometry of Discrete Integrable Systems and Discrete Painlevé Equations,* Waseda University, Tokyo, Japan |
| June 2018 | *Discrete Mathematical Modeling* Seminar, *Gap Probabilities in q-Racah and q-Hahn tiling models and discrete Painlevé equations,* Graduate School of Mathematical Sciences, The University of Tokyo, Tokyo, Japan |
| June 2018 | *Department of Mathematics* Seminar, *Geometry of Discrete Integrable Systems,* Shanghai Jiaotong University, Shanghai, P.R.China |
| June 2018 | *Department of Mathematics* Seminar, *Geometry of Discrete Integrable Systems,* Tsinghua University, Beijing, P.R.China |
| June 2018 | *Research* Seminar, *Gap Probabilities in q-Racah and q-Hahn tiling models and discrete Painlevé equations,* Academy of Mathematics and System Science, Beijing, P.R. China |
| June 2018 | *Department of Mathematics* Seminar, *Geometry of Discrete Painlevé Equations and Applications,* Sun Yat-sen University, Guangzhou, P.R. China |

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| May 2018 | *Center of Integrable Systems* Seminar, *Geometry of Discrete Integrable Systems,* Yaroslavl State University, Yaroslavl, Russia |
| May 2018 | *Mathematical Physics* Seminar, *Geometry of Discrete Painlevé Equations and Applications,* Higher School of Economics and Skoltech Center for Advanced Studies, Moscow, Russia |
| May 2018 | *Graduate Students* Seminar, *Birational Representations of Affine Weyl Groups and Discrete Painlevé Equations* Higher School of Economics, Moscow, Russia |
| April 2018 | *FRAGMENT* Seminar, *Geometry of Discrete Integrable Systems,* Colorado State University, Fort Collins, CO, USA |
| March 2018 | *Topological Methods in Dynamics* Seminar, *Geometry of Discrete Integrable Systems,* Higher School of Economics, Nizhny Novgorod, Russia |
| March 2018 | *Applied Mathematics* Seminar, *Gap Probabilities in q-Racah and q-Hahn tiling models and discrete Painlevé equations,* Colorado State University, Fort Collins, CO, USA |
| February 2018 | *Nonlinear Waves* Seminar, *Geometry of Discrete Integrable Systems,* The University of Colorado, Boulder, CO, USA |
| February 2018 | *School of Mathematical Sciences* Seminar, *Geometry of Discrete Integrable Systems,* The University of Northern Colorado, Greeley, CO, USA |
| November 2017 | *Probability* Seminar, *The Beautiful Geometry of Discrete Painlevé Equations,* The University of Rochester, Rochester, NY, USA |
| October 2017 | *Analysis and Dynamics* Seminar, *Painlevé equations and the Isomonodromy,* The University of Denver, Denver, CO, USA |
| September 2017 | *Mathematical Physics* Seminar, *Geometry of Discrete Integrable Systems,* Columbia University, New York, NY, USA |
| May 2017 | *Mathematical Physics* Seminar, *Geometric Deautonomization and Discrete Painlevé Equations,* Higher School of Economics and Skoltech Center for Advanced Studies, Moscow, Russia |
| February 2017 | *Department of Mathematics* Colloquium, *The Beautiful Geometry of Discrete Painlevé Equations,* The University of Texas at Dallas, Richardson, TX, USA |
| September 2016 | *FRAGMENT* Seminar, *On the Geometry of Discrete Painlevé equations of type $A_2^{(1)*}$,* Colorado State University, Fort Collins, CO, USA |
| March 2016 | *School of Mathematical Sciences* Seminar, *On the Geometry of Difference Painlevé Equations,* The University of Northern Colorado, Greeley, CO, USA |
| September 2015 | *Department of Mathematics* Colloquium, *Bäcklund Transformations, Discrete Painlevé Equations, and Sakai's Geometric Classification Scheme,* The University of Colorado, Colorado Spring, CO, USA |
| May 2015 | *Mathematisches Institut* Kolloquium des Graduiertenkollegs, *Bäcklund Transformations, Discrete Painlevé Equations, and Sakai's Geometric Classification Scheme,* University of Göttingen, Göttingen, Germany |
| May 2015 | *International Laboratory of Representation Theory and Mathematical Physics*Seminar, *Schlesinger Transformations and Difference Painlevé Equations,* Higher School of Economics, Moscow, Russia |
| April 2015 | *Analysis and Computational Mathematics* Seminar, *Bäcklund Transformations, Discrete Painlevé Equations, and Sakai's Geometric Classification Scheme,* The University of Wyoming, Laramie, WY, USA |
| March 2015 | *Integrable Systems* Seminar, *From Schlesinger Transformations to Difference Painlevé Equations,* Waseda University, Tokyo, Japan |
| February 2015 | *Combinatorics* Seminar, *From Affine Weyl Groups to Discrete Painlevé Equations,* Colorado State University, Fort Collins, CO, USA |
| February 2015 | *Nonlinear Waves* Seminar, *Bäcklund Transformations, Discrete Painlevé Equations, and Sakai's Geometric Classification Scheme,* The University of Colorado, Boulder, CO, USA |
| February 2015 | *School of Mathematical Sciences* Seminar, *Bäcklund Transformations and Discrete Painlevé Equations,* The University of Northern Colorado, Greeley, CO, USA |
| December 2014 | *Geometry and Physics* Seminar, *Difference Painlevé Equations,* National Institute of Physics and Nuclear Engineering, Bucharest, Romania |
| December 2014 | *International Laboratory of Representation Theory and Mathematical Physics* Seminar, *Difference Painlevé Equations,* Higher School of Economics, Moscow, Russia |
| November 2014 | *Mathematical Physics and Harmonic Analysis* Seminar, *Discrete Schlesinger Equations and Difference Painlevé Equations,* Texas A&M University, College Station, TX, USA |
| August 2014 | *Integrable Systems* Seminar, *Discrete Schlesinger Equations and Difference Painlevé Equations,* University of Sydney, Sydney, NSW, Australia |
| March 2014 | *Graduate School of Mathematical Sciences* Seminar, *Discrete Schlesinger Equations and Difference Painlevé Equations,* University of Tokyo, Tokyo, Japan |

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| March 2014 | *Nonlinear Waves* Seminar, *Discrete Schlesinger Equations and Difference Painlevé Equations,* The University of Colorado, Boulder, CO, USA |
| January 2014 | *FRAGMENT* Seminar, *Isomonodromic Deformations of Fuchsian Systems and Painlevé Equations,* Colorado State University, Fort Collins, CO, USA |
| July 2013 | *Integrable Systems and Mathematical Physics* Seminar, *Discrete Schlesinger Transformations, Discrete Painlevé Equations, and Birational Geometry of Algebraic Surfaces,* University of Glasgow, Glasgow, UK |
| May 2013 | *Mathematical Physics* Seminar, *Discrete Schlesinger Transformations and Difference Painlevé Equations,* Concordia University, Montreal, QB, Canada |
| May 2013 | *SUNYIT University* Colloquium, *On the Geometry of Discrete Painlevé Equations,* SUNY Institute of Technology, Utica, NY, USA |
| November 2012 | *Nonlinear Waves* Seminar, *Discrete Hamiltonian Structure of Schlesinger Transformations,* The University of Colorado, Boulder, CO, USA |
| October 2011 | *Joint Applied Mathematics and Statistics and Computer Science* Colloquium, *Discrete Integrable Systems, Difference Painlevé Equations, and the Problem of Matrix Factorizations,* Colorado School of Mines, Golden, CO, USA |
| November 2009 | *Nonlinear Waves* Seminar, *Factorizations of Rational Matrix Functions with Applications to Discrete Integrable Systems and Discrete Painlevé Equations,* The University of Colorado, Boulder, CO, USA |
| September 2009 | *Department of Mathematics* Colloquium, *Factorizations of Rational Matrix Functions with Applications to Discrete Integrable Systems and Discrete Painlevé Equations,* University of Wyoming, Laramie, WY, USA |
| September 2009 | *Department of Mathematics* Colloquium, *Factorizations of Rational Matrix Functions with Applications to Discrete Integrable Systems and Discrete Painlevé Equations,* The University of Colorado, Colorado Spring, CO, USA |
| November 2008 | *School of Mathematical Sciences* Seminar, *Discrete Integrable Systems and Factorization of Matrices,* The University of Northern Colorado, Greeley, CO, USA |
| October 2008 | *Algebra* Seminar, *Discrete Integrable Systems and Factorization of Matrices,* Colorado State University, Fort Collins, CO, USA |

Mini-Courses and Special Topics Courses

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| November 2022 | *Department of Mathematics* Special Topics Course *Discrete Integrable Systems and Painlevé Equations* Shanghai University, Shanghai, P.R.China <br> ○ *Lecture I: A QRT Mapping: an example of a discrete integrable system* <br> ○ *Lecture II: From QRT to Painlevé: a geometric deautonomization approach* <br> ○ *Lecture III: Point configurations and birational representations of some affine Weyl groups* <br> ○ *Lecture IV: Discrete Painlevé Equations* <br> ○ *Lecture V: Selected Extra Topics* |
| May 2022 | *Random Matrix EurAsia 2022 International Workshop* (online) Tutoria *Geometry of Discrete Integrable Systems* Institute for Mathematical Sciences, National University of Singapore, Singapore <br> ○ *Lecture I: Introduction to geometric aspects of autonomous discrete integrable systems (QRT maps)* <br> ○ *Lecture II: Deautonomization of QRT maps and discrete Painlevé equations* <br> ○ *Lecture III: Painlevé equations and their symmetries (Bäcklund transformations) from the geometric point of view* <br> ○ *Lecture IV: Geometric theory of discrete Painlevé equations* |
| November 2021 | *Department of Mathematics* Special Topics Course *Geometry of Painlevé Equations* Shanghai University, Shanghai, P.R.China <br> ○ *Lectures I–II: Painlevé Equations and Bäcklund Transformations* <br> ○ *Lecture III–IV: Okamoto Space of Initial Conditions* <br> ○ *Lecture V–VI: Affine Weyl Groups and Symmetries* |
| July 2021 | *Contemporary Mathematics* Summer School (short 4-lecture course) *Geometry of Discrete Integrable Systems* link: `https://mccme.ru/dubna/2021/courses/dzhamay.html`, Dubna, Russia <br> ○ *Lecture I: The QRT Map as an Example of a Discrete Integrable System* <br> ○ *Lecture II: Resolution of Singularities and the QRT Surface* <br> ○ *Lecture III: Divisor, Divisor Classes, and the Picard Group* <br> ○ *Lecture IV: Linearization of the QRT Map on the Picard Lattice* <br> ○ *Lecture V: What is a Discrete Painlevé Equation?* |
| February, 2021 | *Yaroslavl State University* (short 4-lecture course, link: `https://cis.uniyar.ac.ru/event/350`), *Partitions, Young Diagrams, and the Elements of Combinatorics* Yaroslavl, Russia <br> ○ *Lectures I–II: Partitions and Young Diagrams. The Method of Reflections* <br> ○ *Lectures III–IV: Young Tableaux, Maya Diagrams, and Hypergeometric Coefficients* |

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| November, 2020 | *Yaroslavl State University* (short 4-lecture course (online), link: `https://cis.uniyar.ac.ru/event/337`), *Finite Groups, Cayley Diagrams, and Applications to Combinatorics* Yaroslavl, Russia |

November, 2020    *Yaroslavl State University* (short 4-lecture course (online), link: `https://cis.uniyar.ac.ru/event/337`), *Finite Groups, Cayley Diagrams, and Applications to Combinatorics* Yaroslavl, Russia
- *Lectures I–II: Finite Groups and Cayley Diagrams*
- *Lecture III–IV: Permutations and Symmetries. Counting Burnside Lemma and Applications to Combinatorics*

July 2020    *7th Geometric Methods in Mathematical Physics* Summer School (online) (short 4-lecture course `http://dubrovinlab.msu.ru/events/school2020`), *Discrete Integrable Systems and Painlevé Equations* Moscow State University, Moscow, Russia
- *Lecture I: Painlevé Equations and Bäcklund Transformations*
- *Lecture II: Okamoto Space of Initial Conditions*
- *Lecture III: Affine Weyl Groups and Symmetries*
- *Lecture IV: Discrete Integrable Systems: QRT Maps and Discrete Painlevé Equations*

March 2020    *Laboratory of Algebraic Geometry and Homological Algebra* Topics Course *Discrete Integrable Systems and Painlevé Equations* Moscow Institute of Physics and Technology, Dolgoprudny, Russia
- *Lecture I: What are Painlevé Equations? Differential Painlevé Equations and their Hamiltonian Form.*
- *Lecture II: Bäcklund Transformations of Painlevé Equations*
- *Lecture III: The Okamoto Space of Initial Conditions for Differential Painlevé Equations*
- *Lecture IV: Elements of Algebraic Geometry: Algebraic Surfaces and Picard Lattices. Dynkin Diagrams*
- *Lecture V: Surface and Symmetry Sublattices and their Root Bases. Symmetries and Affine Weyl Groups.*
- *Lecture VI: Birational Representations of Affine Weyl Groups*
- *Lecture VII: Translations in Affine Weyl Groups and Discrete Painlevé Equations*

February – March 2020    *Faculty of Mathematics* Topics Course *Discrete Integrable Systems and Painlevé Equations* Higher School of Economics, Moscow, Russia
- *Lecture I: A QRT Mapping: an example of a discrete integrable system*
- *Lecture II: From QRT to Painlevé: a geometric deautonomization approach*
- *Lecture III: Point configurations and birational representations of some affine Weyl groups*
- *Lecture IV: Discrete Painlevé Equations*
- *Lecture V: Selected Extra Topics*

August – November 2019    *Department of Mathematics* Special Topics Course *Discrete Integrable Systems and Painlevé Equations* Shanghai University, Shanghai, P.R.China
- *10 lectures*

December 2018    *Yaroslavl State University* (short 4-lecture course), *Equations and Symmetries* Yaroslavl, Russia
- *Lecture I: Examples of Algebraic Structures; Equations in General Rings and Fields*
- *Lecture II: Quotient Rings and Fields*
- *Lecture III: Groups and Symmetries*
- *Lecture IV: Splitting Fields and Elements of Galois Theory*

July 2018    *Contemporary Mathematics* Summer School (short 4-lecture course), *Equations and Symmetries* Dubna, Russia
- *Lecture I: Examples of Algebraic Structures; Equations in General Rings and Fields*
- *Lecture II: Quotient Rings and Fields*
- *Lecture III: Groups and Symmetries*
- *Lecture IV: Splitting Fields and Elements of Galois Theory*

June 2018    *Northwest University* (short 3-lecture course), *Geometry of Discrete Integrable Systems* Xi'an, P.R.China
- *Lecture I: Geometry of Discrete Integrable Systems*
- *Lecture II: From QRT Maps to Discrete Painlevé Equations*
- *Lecture III: Discrete Painlevé Equations from Birational Representations of Affine Weyl Groups*

July 2017    *Contemporary Mathematics* Summer School (short 5-lecture course), *Geometry of Discrete Painlevé Equations* Dubna, Russia
- *Lecture I: Examples of Discrete Dynamical Systems: Autonomous (QRT Maps) and Non-autonomous (dP Equations)*
- *Lecture II: Necessary Algebraic Geometry Background: Divisors and the Picard Lattice*
- *Lecture III: Sakai's Theory of Discrete Painlevé Equations*
- *Lecture IV: Birational Representations of Affine Weyl Groups and Discrete Painlevé Equations*
- *Lecture V: The Beautiful Geometry of Discrete Painlevé Equations and Applications*

## Poster Presentations

April 2017    *Faculty* poster session (as a SSI recipient), *Geometric Deautonomization and Discrete Painlevé Equations,* The University of Northern Colorado, Greeley, CO, USA

May 2016    *Discrete Painlevé Equations* NSF/CBMS Regional Conference in the Mathematical Sciences, *The Beautiful Geometry of Discrete Painlevé Equations,* (joint with *Caleb Dahlke*), The University of Texas – Rio Grande Valley, Edinburg, TX, USA

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| November 2015 | *Faculty* poster session (as a SSI recipient), *Geometry of Discrete Painlevé Equations,* The University of Northern Colorado, Greeley, CO, USA |
| December 2012 | *Algebraic Structures in Integrable Systems* International Conference, *Discrete Hamiltonian Structure of Schlesinger Transformations,* Moscow State University, Moscow, Russia |

Outreach Activities

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| July 2021 | *Public* Lecture, *Ornaments, Symmetries, and Groups,* The Educational Center *Sirius* for gifted children, Sochi, Russia |
| May 2018 | *Higher School of Economics* Visiting Scholar (Teaching Excellence Programme) (short 3-lecture course), *Active Classroom* Moscow, Russia |

- ○ Lecture I: Teaching mathematics in the Active Classroom learning environment: an overview
- ○ Lecture II: Examples of course and assessment designs that promote student engagement and conceptual understanding
- ○ Lecture III: Teaching mathematics for future secondary teachers: a practicum

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| March 2018 | *Higher School of Economics* Teacher Professional Development Program, *Elements of Advanced Mathematics in the School Curriculum* Niznhy Novgorod, Russia |

- ○ Lecture I: Advanced Algebra Approach to Equation Solving
- ○ Lecture II: Symmetries and Classification Problems
- ○ Lecture III: Cut, Paste, and Color: a Problem-Solving Practicum
- ○ Panel: Secondary Teacher Preparation Programs in the United States

## Selected Recent Conferences, Workshops, and Programs Organized

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| August 2023 | **ICIAM 2023 International Congress**, Tokyo, Japan. Mini-symposium on *Theory and applications of Painlevé-type equations* (co-organizer) |
| October 2022 | **Algebraic Geometry, Mathematical Physics, and Solitons** — An International Conference celebrating the work of *Igor Krichever*, Columbia University, New York, NY; (member of the Organizing Committee) |
| June 2022 | **ICM 2022 International Congress** (Russia). Satellite Conference on *Isomonodromic Deformations, Painlevé Equations, and Integrable Systems*, Skoltech, Moscow, Russia (member of the Organizing Committee) — hosted virtually at Columbia University |
| March 2022 | **12th International IMACS Conference**, Athens, GA, USA (Program Committee member); Special Session on *Discrete Painlevé Equations and Related Topics* (co-organizer) |
| July 2019 | **ICIAM 2019 International Congress**, Valencia, Spain. Mini-symposium on *Recent Advances in Applied Integrable Systems: Theory and Computations* (co-organizer) |
| April 2019 | **11th International IMACS Conference**, Athens, GA, USA (Program Committee member); Special Session on *Random Matrices, Painlevé Equations, and Integrable Systems* (co-organizer) |
| January 2018 | **Joint Mathematics Meeting**, San Diego, CA, USA Special session on *Algebraic, Analytic, and Geometric Aspects of Integrable Systems, Painlevé equations, and Random Matrices* (co-organizer) |
| March 2017 | **10th International IMACS Conference**, Athens, GA, USA (Program Committee member); Special Session on *Painlevé Equations, Integrable Systems, and Random Matrices* (co-organizer) |
| October 2016 | **AMS 2016 Fall Western Section Meeting**, Denver, US Special session on *Integrable Systems and Soliton Equations* (co-organizer) |
| January 2016 | **Joint Mathematics Meeting**, Seattle, WA, USA Special session on *Integrable Systems, Painlevé Equations, and Random Matrices* (co-organizer) |
| August 2015 | **ICIAM 2015 International Congress**, Beijing, China. Mini-symposium on *Theory and applications of Painlevé-type equations* (co-organizer) |
| April 2015 | **9th International IMACS Conference**, Athens, GA, USA. Special Session on *Discrete and Ultra-discrete Integrable Systems and Painlevé Equations* (co-organizer) |
| January 2014 | **Joint Mathematics Meeting**, Baltimore, MD, USA Special session on *Algebraic and Analytic Aspects of Integrable Systems and Painlevé Equations* (co-organizer) |
| April 2013 | **AMS 2013 Spring Western Section Meeting**, Boulder, US Special session on *Nonlinear Waves and Integrable Systems* (co-organizer) |
| January 2012 | **Joint Mathematics Meeting**, Boston, MA, USA Special session on *Algebraic and Geometric Aspects of Integrable Systems and Random Matrices* (co-organizer) |
| May 2011 | **The Versatility of Integrability** — An International Conference on Integrable Systems in Algebra, Geometry, and Physics (*Celebrating Igor Krichever's 60th Birthday*), Columbia University, New York, NY; (member of the Organizing Committee) |

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| April 2011 | **7th International IMACS Conference**, Athens, GA. Special Session on *Symmetry and Integrability of Discrete and Ultradiscrete Systems* (co-organizer) |
| December 2010 | **7th International Conference on Differential Equations and Dynamical Systems**, Tampa, FL; (member of the Organizing Committee). Special Session on *Integrable Systems: Discrete, Algebraic, and Geometric Aspects* (co-organizer) |

## Honors and Awards

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| 2022 | University of Northern Colorado NHS College **Excellence in Scholarship** Award |
| 2014 | University of Northern Colorado Mortar Board **My Favorite Professor** Award |
| 2013 | University of Northern Colorado NHS College **Excellence in Scholarship** Award |
| 2008, 2010, 2012 | University of Northern Colorado First Year Scholars **Outstanding Faculty** Nomination |
| 1999–2000 | **Carl B. Boyer** Memorial Fellowship |
| 1993–1997 | Columbia University Department of Mathematics Fellowship |