

TODOR ELISEEV MILANOV  
PUBLICATION LIST

**Publications**

- (1) E. Horozov and T. Milanov. *Fuchsian Bispectral Operators*. *Bulletine des Sciences Mathématiques* 126 (2002): 161-192.
- (2) A. Givental and T. Milanov. *Simple Singularities and Integrable Hierarchies*. The Breadth of Symplectic and Poisson Geometry. Boston: Birkhäuser Boston, 2004. 173–201.
- (3) T. Milanov. *Hirota Quadratic Equations for the Extended Toda Hierarchy*. *Duke Math. Journal* 138.1(2007): 161-176.
- (4) T. Milanov. *Equivariant Gromov–Witten theory of  $\mathbb{C}P^1$  and integrable hierarchies*. *Int. Math. Res. Not.* (2008): rnn073-21.
- (5) T. Milanov and H.-H. Tseng. *The Spaces of Laurent Polynomials,  $\mathbb{P}^1$ -orbifolds, and Integrable Hierarchies*. *Journal fuer die Reine und Angewandte Mathematik* 622(2008): 189-235.
- (6) T. Milanov and H.-H. Tseng. *Equivariant Orbifold Structures on the Projective Line and Integrable Hierarchies*. *Adv. in Math.* 226.1 (2011): 641-672
- (7) E. Frenkel, A. Givental, and T. Milanov. *Soliton Equations, Vertex Operators, and Simple Singularities*. *Functional Analysis and Other Mathematics*, vol. 3, no. 1 (2010): 47–63.
- (8) B. Bakalov and T. Milanov.  *$\mathcal{W}$ -constraints for the total descendant potential of a simple singularity*. *Compositio Math.* 149(2013): 840–888.
- (9) T. Milanov. *The Eynard–Orantin recursion for the total ancestor potential*. *Duke Math. J.* 163, no. 9 (2014): 1795–1824.
- (10) T. Milanov. *Analyticity of the total ancestor potential in singularity theory*. *Adv. in Math.* 255.1 (2014): 217-241.
- (11) H. Iritani, T. Milanov, and V. Tonita. *Reconstruction and Convergence in Quantum  $K$ -Theory via Difference Equations*. *Int. Math. Res. Notices* (2014), doi: 10.1093/imrn/rnu026
- (12) T. Milanov and Y. Shen. *The modular group for the total ancestor potential of Fermat simple elliptic singularities*. *Comm. in Numb. Theory and Phys.*, Vol. 8, no. 2 (2014): 329–368.
- (13) T. Milanov. *The Eynard–Orantin recursion for simple singularities*. *Commun. Number Theory Phys.*, Vol. 9, no. 4(2015): 707–739.
- (14) T. Milanov and Y. Shen. *Global mirror symmetry for invertible simple elliptic singularities*. *Ann. Inst. Fourier (Grenoble)*, Vol. 66, no. 1(2016): 271–330.
- (15) T. Milanov, Y. Shen, and H.-H. Tseng. *Gromov–Witten theory of Fano orbifold curves, Gamma integral structures and ADE-Toda hierarchies*. *Geom. Topol.*, Vol. 20, no. 4(2016): 2135–2218.
- (16) D. Lewanski and T. Milanov.  *$\mathcal{W}$ -algebra constraints and topological recursion for  $A_N$ -singularity*. *Internat. J. Math.*, vol. 27, no. 13 (2016): 21p.
- (17) T. Milanov, Y. Ruan, and Y. Shen. *Gromov–Witten theory and cycle-valued modular forms*. *J. Reine Angew. Math. (Crelles Journal)*, vol. 735 (2018), 287–315.
- (18) T. Milanov and V. Tonita.  *$K$ -theoretic Gromov–Witten invariants in genus 0 and integrable hierarchies*. *Lett. Math. Phys.*, vol. 108, no. 6 (2018): 1455–1483.
- (19) T. Milanov. *The total ancestor potential in singularity theory*. In: *B-model Gromov–Witten theory*, Trends in Math., eds. E. Clader and Y. Ruan, Birkhäuser/Springer, Cham, (2018): 539–571.

- (20) T. Milanov. *The phase factors in singularity theory*. In: Primitive forms and related subjects – Kavli IPMU 2014, Adv. Studies in Pure Math. 83, eds. K. Hori, C. Li, Si Li, and K. Saito, Math. Soc. of Japan, Tokyo, (2019): 295–326.
- (21) T. Milanov. *The period map for quantum cohomology of  $\mathbb{P}^2$* . Adv. Math., vol. 351 (2019): 804–869.
- (22) J. Cheng and T. Milanov. *The 2-component BKP grassmannian and simple singularities of type D*. Int. Math. Res. Notices, 2019, <https://doi.org/10.1093/imrn/rnz325>.
- (23) T. Milanov and C. Zha. *Integral structure for simple singularities*. SIGMA, vol. 16, Paper No. 81, (2020): 28p.
- (24) T. Milanov. *Singularity theory and mirror symmetry*. In: Singularities, mirror symmetry, and the gauged linear sigma model, Contemporary Mathematics, vol. 763, eds. T. Jarvis and N. Priddis, AMS, (2021): 131–153.
- (25) H. Iritani, T. Milanov, Y. Ruan, Y. Shen. *Gromov–Witten theory of quotients of Fermat Calabi–Yau varieties*. Memoirs of the American Math. Soc., vol. 269, no. 1310 (2021), 104p.
- (26) J. Cheng and T. Milanov. *The extended D-Toda hierarchy*. Selecta Mathematica, vol. 27, no. 24 (2021): 85p.
- (27) J. Cheng and T. Milanov. *Hirota Quadratic Equations for the Gromov–Witten invariants of  $\mathbb{P}_{n-2,2,2}^1$* . Adv. in Math., vol. 388 (2021) 107860.
- (28) A. Alexandrov and T. Milanov. *Matrix model for the total descendent potential of a simple singularity of type D*. Letters in Math. Phys., vol. 111 (2021), article number 88.
- (29) T. Milanov and A. Roquefeuil. *Confluence in quantum K-theory of weak Fano manifolds and  $q$ -oscillatory integrals for toric manifolds*. Adv. in Math., vol. 409, Part B (2022), 108682.
- (30) T. Milanov and X. Xia. *Reflection vectors and quantum cohomology of blowups*. SIGMA 20 (2024), 029, 60p.

### Work in progress

- (1) T. Milanov and K. Saito. *Primitive forms and vertex operators*. This is a book project. 1st draft is ready.
- (2) T. Milanov. *K-theoretic Heisenberg algebras and permutation-equivariant Gromov–Witten theory*. submitted, available on arXiv:2403.14964
- (3) J.A. Cruz Morales and T. Milanov. *Dubrovin conjecture and the second structure connection*. submitted, available on arXiv:2410.09709