

PUBLICATIONS AND PREPRINTS

1. (with Martijn Kool) Higher rank sheaves on threefolds and functional equations. 33 pages. arXiv:1706.05246.
2. (With Artan Sheshmani, Shing-Tung Yau) Nested Hilbert schemes on surfaces: Virtual fundamental class. 47 pages. arXiv:1701.08899.
3. (With Artan Sheshmani, Shing-Tung Yau) Localized Donaldson-Thomas theory of surfaces. 28 pages. arXiv:1701.08902.
4. (With Martijn Kool) Rank 2 wall-crossing and the Serre correspondence. 19 pages. arXiv:1602.03113. Accepted to be published in *Selecta Mathematica*.
5. (With Martijn Kool and Benjamin Young) Rank 2 sheaves on toric 3-folds: classical and virtual counts. 62 pages. arXiv:1509.03536. Accepted to be published in *International Mathematics Research Notices*.
6. (With Artan Sheshmani) Intersection numbers on the relative Hilbert schemes of points on surfaces. 13 pages. arXiv:1504.01107. Accepted to be published in *Asian Journal of Mathematics*.
7. (With Artan Sheshmani) Generalized Donaldson-Thomas Invariants of 2-Dimensional sheaves on local \mathbb{P}^2 . *Advances in Theoretical and Mathematical Physics* 19 (2015), No. 3, 674–699. arXiv:1309.0056.
8. (With Artan Sheshmani and Richard Thomas) Counting curves on surfaces in Calabi-Yau 3-folds. *Mathematische Annalen* 360 (2014), 67–78. arXiv:1309.0051.
9. (With Artan Sheshmani) Donaldson-Thomas invariants of 2-Dimensional sheaves inside threefolds and modular forms. 29 pages. arXiv:1309.0050. (Submitted)
10. (With Artan Sheshmani and Yukinobu Toda) Stable pairs on nodal $K3$ fibrations. 29 pages. arXiv:1308.4722. Accepted to be published in *International Mathematics Research Notices*.
11. (With Martijn Kool) Stable reflexive sheaves and localization. 26 pages. arXiv:1308.3688. Accepted to be published in *Journal of Pure and Applied Algebra*.
12. (With Dagan Karp and Sam Payne) Cremona symmetry in Gromov-Witten theory. 15 pages. arXiv:1412.1516. Accepted to be published in *Pro Mathematica*.
13. (With Yunfeng Jiang and Martijn Kool) Toric sheaves on weighted projective planes. 48 pages and 10 figures. Accepted to be published *Advances in Theoretical and Mathematical Physics*. arXiv:1209.3922.
14. (With Hsian-Hua Tseng) On computations of genus zero two-point descendant Gromov-Witten invariants. *Michigan Mathematical Journal* 62 (2013), Issue 4, 753–768. arXiv:1207.6071.

15. (With Coates, T. and Iritani, H. and Jiang, Y. and Johnson, P. and Manolache, C.) The Quantum Lefschetz Hyperplane Principle Can Fail for Positive Orbifold Hypersurfaces. *Mathematical Research Letters* 19 (2012), no. 05, 997–1005. arXiv: 1202.2754.
16. (With Wan Keng Cheong) Orbifold Gromov–Witten theory of the symmetric product of A_r . *Geometry & Topology*, Volume 16, Issue 1 (2012), pp. 475–526. arXiv:0909.1536.
17. (With Hsian-Hua Tseng) On Donaldson-Thomas invariants of three-fold stacks and gerbes. *Proceedings of the American Mathematical Society* 141 (2013), no. 1, 191203. arXiv:1001.0435.
18. (With Yunfeng Jiang) Counting invariants for the ADE McKay quivers. 30 pages and 1 figure. arXiv:0910.5551.
19. (with Jim Bryan) BPS invariants for resolutions of polyhedral singularities, 2009. *Selecta Mathematica*, Volume 15, Issue 4 (2009), pp. 521–534. arXiv:0905.0537.
20. (with Jim Bryan) The Quantum McKay Correspondence for polyhedral singularities, 2009. *Inventiones Mathematicae*, Volume 178, Issue 3 (2009): pp. 655–681. arXiv:0803.3766.
21. (with Jim Bryan) Hurwitz-Hodge integrals, the E_6 and D_4 root systems, and the crepant resolution conjecture. *Advances in Mathematics*, Volume 221, Number 4 (2009), pp. 1047-1068. arXiv:0708.4244.
22. (with Jim Bryan) Root systems and the quantum cohomology of ADE resolutions. *Algebra and Number Theory*, Volume 2, Number 4 (2008), pp. 369-390. arXiv:0707.1337.
23. On the equivariant Gromov-Witten theory of \mathbb{P}^2 -bundles over curves. *Communications in Analysis and Geometry*, Volume 14, Number 4 (2006), pp. 633–671. arXiv:math/0409592.
24. (with Yinan Song) Evidence for the Gromov-Witten/Donaldson-Thomas correspondence. *Mathematical Research Letters*, Volume 13, Issue 4 (2006), pp. 623–630. arXiv:math/0510006.
25. On Szabo’s proof of generalized Thom conjecture for symplectic four manifolds. Master thesis, Submitted to the library of Sharif University of Technology, July 2002.