

## PUBLICATION LIST

### Publications (Peer Reviewed)

- (1) Oliver Pechenik and T.S.: *K-theoretic crystals for set-valued tableaux of rectangular shapes*. Algebraic Combin., to appear, (2022).  
[arXiv:1904.09674](#)
- (2) Rekha Biswal and T.S.: *Kirillov–Reshetikhin crystals  $B^{7,s}$  for type  $E_7^{(1)}$* . Comm. Algebra, **50**(2) (2022) pp. 508–523. [doi:10.1080/00927872.2021.1959923](#),  
[arXiv:1901.00182](#)
- (3) Cara Monical, Oliver Pechenik, and T.S.: *Crystal structures for symmetric Grothendieck polynomials*. Transform. Groups, **26**(3) (2021) pp. 1025–1075.  
[doi:10.1007/s00031-020-09623-y](#), [arXiv:1807.03294](#)
- (4) Ben Salisbury and T.S.: *Rigged configurations and the \*-involution for generalized Kac–Moody algebras*. J. Algebra, **573** (2021) pp. 148–168.  
[doi:10.1016/j.jalgebra.2020.12.035](#), [arXiv:1812.07746](#)
- (5) Katsuyuki Naoi and T.S.: *Existence of Kirillov–Reshetikhin crystals for near adjoint nodes in exceptional types*. J. Pure Appl. Algebra, **225**(5) (2021) 106593.  
[doi:10.1016/j.jpaa.2020.106593](#), [arXiv:1903.11681](#)
- (6) Mee Seong Im and T.S.: *The regularity of almost-commuting Grothendieck–Springer resolutions and Borel analogs of Calogero–Moser varieties*. J. Lie Theory, **31**(1) (2021) pp. 127–148. [arXiv:1812.02283](#)
- (7) T.S.: *Uniform description of the rigged configuration bijection*. Selecta Math. (N.S.), **26**(3) (2020), article 42. [doi:10.1007/s00029-020-00564-8](#), [arXiv:1703.08945](#)
- (8) Valentin Buciumas and T.S.: *Double Grothendieck polynomials and colored lattice models*. Int. Math. Res. Not. IMRN., rnaa327 (2020). [doi:10.1093/imrn/rnaa327](#),  
[arXiv:2007.04533](#)
- (9) Valentin Buciumas, T.S., and Katherine Weber: *Colored five-vertex models and Lascoux polynomials and atoms*. J. Lond. Math. Soc., **102**(3) (2020) pp. 1047–1066.  
[doi:10.1112/jlms.12347](#), [arXiv:1908.07364](#)
- (10) Erik Aas, Darij Grinberg, and T.S.: *Multiline queues with spectral parameters*. Comm. Math. Phys., **374**(3) (2020) pp. 1743–1786. [doi:10.1007/s00220-020-03694-4](#),  
[arXiv:1810.08157](#)
- (11) Graham Hawkes and T.S.: *Crystal structures for canonical Grothendieck functions*. Algebraic Combin., **3**(3) (2020) pp. 727–755. [doi:10.5802/alco.111](#), [arXiv:1907.11415](#)
- (12) Ben Salisbury and T.S.: *Candidate for the crystal  $B(-\infty)$  for the queer Lie superalgebra*. Kyoto J. Math., to appear (2020). [arXiv:1903.03236](#)
- (13) Rekha Biswal and T.S.: *Existence of Kirillov–Reshetikhin crystals for multiplicity free nodes*. Publ. Res. Inst. Math. Sci., **56**(4) (2020) pp. 761–778. [doi:10.4171/PRIMS/56-4-4](#),  
[arXiv:1902.00769](#)

- (14) Emily Gunawan and T.S.: *Kirillov–Reshetikhin crystals  $B^{1,s}$  using Nakajima monomials for  $\widehat{\mathfrak{sl}}_n$* . *Algebr. Represent. Theory*, **23**(4) (2020) pp. 1609–1635.  
[doi:10.1007/s10468-019-09904-5](https://doi.org/10.1007/s10468-019-09904-5), [arXiv:1610.09224](https://arxiv.org/abs/1610.09224)
- (15) Se-jin Oh and T.S.: *Categorical relations between Langlands dual quantum affine algebras: Exceptional cases*. *Comm. Math. Phys.*, **368**(1) (2019) pp. 295–367.  
[doi:10.1007/s00220-019-03287-w](https://doi.org/10.1007/s00220-019-03287-w), [arXiv:1802.09253](https://arxiv.org/abs/1802.09253)  
 Addendum – *Comm. Math. Phys.*, **371**(2) (2019) pp. 833–837.  
[doi:10.1007/s00220-019-03570-w](https://doi.org/10.1007/s00220-019-03570-w)
- (16) Xuan Liu and T.S.: *A uniform approach to soliton cellular automata using rigged configurations*. *Ann. Henri Poincaré*, **20**(4) (2019) pp. 1175–1215.  
[doi:10.1007/s00023-019-00773-8](https://doi.org/10.1007/s00023-019-00773-8), [arXiv:1706.02443](https://arxiv.org/abs/1706.02443)
- (17) Cristian Lenart and T.S.: *On higher level Kirillov–Reshetikhin crystals, Demazure crystals, and related uniform models*. *J. Algebra*, **539** (2019) pp. 285–304.  
[doi:10.1016/j.jalgebra.2019.07.036](https://doi.org/10.1016/j.jalgebra.2019.07.036), [arXiv:1809.02908](https://arxiv.org/abs/1809.02908)
- (18) Arthur Lubovsky and T.S.: *Alcove path model for  $B(\infty)$* . *J. Pure Appl. Algebra*, **223**(11) (2019) pp. 4778–4800. [doi:10.1016/j.jpaa.2019.02.015](https://doi.org/10.1016/j.jpaa.2019.02.015), [arXiv:1611.09618](https://arxiv.org/abs/1611.09618)
- (19) Jia Huang, Brendon Rhoades, and T.S.: *Hall–Littlewood polynomials and a Hecke action on ordered set partitions*. *Proc. Amer. Math. Soc.*, **147**(5) (2019) pp. 1839–1850.  
[doi:10.1090/proc/14157](https://doi.org/10.1090/proc/14157), [arXiv:1709.07995](https://arxiv.org/abs/1709.07995)
- (20) Se-jin Oh and T.S.: *Identities from representation theory*. *Discrete Math.*, **342**(9) (2019) pp. 2493–2541. [doi:10.1016/j.disc.2019.05.020](https://doi.org/10.1016/j.disc.2019.05.020), [arXiv:1805.00113](https://arxiv.org/abs/1805.00113)
- (21) Masato Okado, Anne Schilling and T.S.: *Rigged configuration bijection and the proof of the  $X = M$  conjecture for nonexceptional affine types*. *J. Algebra*, **516** (2018) pp. 1–37.  
[doi:10.1016/j.jalgebra.2018.08.031](https://doi.org/10.1016/j.jalgebra.2018.08.031), [arXiv:1707.04876](https://arxiv.org/abs/1707.04876)
- (22) Ben Salisbury and T.S.: *Rigged configurations and the  $*$ -involution*. *Lett. Math. Phys.*, **108**(9) (2018) pp. 1985–2007. [doi:10.1007/s11005-018-1063-2](https://doi.org/10.1007/s11005-018-1063-2), [arXiv:1601.06137](https://arxiv.org/abs/1601.06137)
- (23) Ben Salisbury and T.S.: *Virtual crystals and Nakajima monomials*. *SIGMA Symmetry Integrability Geom. Methods Appl.*, **14** (2018), 103, 19 pages.  
[doi:10.3842/SIGMA.2018.103](https://doi.org/10.3842/SIGMA.2018.103), [arXiv:1707.09638](https://arxiv.org/abs/1707.09638)
- (24) Jianping Pan and T.S.: *Virtualization map for the Littelmann path model*. *Transform. Groups*, **23**(4) (2018), pp. 1045–1061. [doi:10.1007/s00031-017-9456-3](https://doi.org/10.1007/s00031-017-9456-3),  
[arXiv:1509.08103](https://arxiv.org/abs/1509.08103)
- (25) Masato Okado, Reiho Sakamoto, Anne Schilling and T.S.: *Type  $D_n^{(1)}$  rigged configuration bijection*. *J. Algebraic Combin.*, **46**(2) (2017) pp. 341–401.  
[doi:10.1007/s10801-017-0756-4](https://doi.org/10.1007/s10801-017-0756-4), [arXiv:1603.08121](https://arxiv.org/abs/1603.08121)
- (26) Ben Salisbury and T.S.: *Rigged configurations for all symmetrizable types*. *Electron. J. Combin.*, **24**(1) (2017) #P1.30. [doi:10.37236/6028](https://doi.org/10.37236/6028), [arXiv:1509.07833](https://arxiv.org/abs/1509.07833)
- (27) T.S.: *Rigged configurations as tropicalizations of loop Schur functions*. *J. Integrable Syst.*, **2**(1) (2017). [doi:10.1093/integr/xyw015](https://doi.org/10.1093/integr/xyw015), [arXiv:1607.03232](https://arxiv.org/abs/1607.03232)
- (28) Ben Salisbury and T.S.: *Connecting marginally large tableaux and rigged configurations via crystals*. *Algebr. Represent. Theory*, **19**(3) (2016) pp. 1–24.  
[doi:10.1007/s10468-015-9587-y](https://doi.org/10.1007/s10468-015-9587-y), [arXiv:1505.07040](https://arxiv.org/abs/1505.07040)

- (29) T.S.: *A crystal to rigged configuration bijection for type  $D_4^{(3)}$* . J. Algebra, **448C** (2016) pp. 294–349. [doi:10.1016/j.jalgebra.2015.09.047](https://doi.org/10.1016/j.jalgebra.2015.09.047), [arXiv:1505.05910](https://arxiv.org/abs/1505.05910)
- (30) Anne Schilling and T.S.: *Crystal structure on rigged configurations and the filling map*. Electron. J. Combin., **22**(1) (2015) #P1.73. [doi:10.37236/4674](https://doi.org/10.37236/4674), [arXiv:1409.2920](https://arxiv.org/abs/1409.2920)
- (31) Ben Salisbury and T.S.: *A rigged configuration model for  $B(\infty)$* . J. Combin. Theory Ser. A, **133** (2015) pp. 29–57. [doi:10.1016/j.jcta.2015.01.008](https://doi.org/10.1016/j.jcta.2015.01.008), [arXiv:1404.6539](https://arxiv.org/abs/1404.6539)
- (32) Paul Prue and T.S.: *Abrams’s stable equivalence for graph braid groups*. Topology Appl., **178** (2014) pp. 136–145. [doi:10.1016/j.topol.2014.09.009](https://doi.org/10.1016/j.topol.2014.09.009), [arXiv:0909.5511](https://arxiv.org/abs/0909.5511)

### Preprints (Undergoing Peer Review)

- (1) Ajeeth Gunna and T.S.: *Integrable systems and crystals for edge labeled tableaux*. Preprint, (2022). [arXiv:2202.06004](https://arxiv.org/abs/2202.06004)
- (2) Ben Brubaker, Pavlo Pylyavskyy, Gabriel Frieden, T.S.: *Crystal invariant theory I: Geometric RSK*. Preprint, (2021). [arXiv:2112.00524](https://arxiv.org/abs/2112.00524)
- (3) Anton Nazarov, Olga Postnova, and T.S.: *Skew Howe duality and limit shapes of Young diagrams*. Preprint, (2021). [arXiv:2111.12426](https://arxiv.org/abs/2111.12426)
- (4) T.S.: Appendix to *Smooth locus of twisted affine Schubert varieties and twisted affine Demazure modules* by Marc Besson and Jiuzu Hong. Preprint, (2021). [arXiv:2010.11357](https://arxiv.org/abs/2010.11357)
- (5) Valentin Buciumas and T.S.: *Quasi-solvable lattice models for  $Sp_{2n}$  and  $SO_{2n+1}$  Demazure atoms and characters*. Preprint, (2021). [arXiv:2101.08907](https://arxiv.org/abs/2101.08907)
- (6) T.S.: Appendix to *Smooth locus of twisted affine Schubert varieties and twisted affine Demazure modules* by Marc Besson and Jiuzu Hong. Preprint, (2021). [arXiv:2010.11357](https://arxiv.org/abs/2010.11357)
- (7) Kohei Motegi and T.S.: *Refined dual Grothendieck polynomials, integrability, and the Schur measure*. Preprint, (2020). [arXiv:2012.15011](https://arxiv.org/abs/2012.15011)
- (8) Se-jin Oh and T.S.: *Simplicity of tensor products of Kirillov–Reshetikhin modules: nonexceptional affine and  $G$  types*. Preprint, (2019). [arXiv:1910.10347](https://arxiv.org/abs/1910.10347)

### Proceedings (Peer Reviewed)

- (1) Valentin Buciumas and T.S.: *Double Grothendieck polynomials and colored lattice models*. Proceedings of FPSAC 2021. Sémin. Lothar. Combin., **85B.39** (2021), 12 pp.
- (2) Kohei Motegi and T.S.: *Refined dual Grothendieck polynomials, integrability, and the Schur measure*. Proceedings of FPSAC 2021. Sémin. Lothar. Combin., **85B.23** (2021), 12 pp.
- (3) Valentin Buciumas, T.S., and Katherine Weber: *Colored five-vertex models and Lascoux polynomials and atoms*. Proceedings of FPSAC 2020. Sémin. Lothar. Combin., **84B.15** (2020), 12 pp.
- (4) Graham Hawkes and T.S.: *Crystal structures for canonical and dual weak symmetric Grothendieck functions*. Proceedings of FPSAC 2020. Sémin. Lothar. Combin., **84B.62** (2020), 12 pp.

- (5) Oliver Pechenik and T.S.: *K-theoretic crystals for set-valued tableaux of rectangular shapes*. Proceedings of FPSAC 2020. Sémin. Lothar. Combin., **84B.19** (2020), 12 pp.
- (6) Ben Salisbury and T.S.: *Candidate for the crystal  $B(-\infty)$  for the queer Lie superalgebra*. Proceedings of FPSAC 2019. Sémin. Lothar. Combin., **82B.54** (2019), 12 pp.
- (7) Cara Monical, Oliver Pechenik, and T.S.: *Crystal structures for symmetric Grothendieck polynomials*. Proceedings of FPSAC 2019. Sémin. Lothar. Combin., **82B.27** (2019), 12 pp.
- (8) Erik Aas, Darij Grinberg, and T.S.: *Multiline queues with spectral parameters*. Proceedings of FPSAC 2018. Sémin. Lothar. Combin., **80B.46** (2018), 12 pp.
- (9) Ben Salisbury and T.S.: *Description of crystals for generalized Kac–Moody algebras using rigged configurations*. Proceedings of FPSAC 2018. Sémin. Lothar. Combin., **80B.20** (2018), 12 pp.
- (10) Ben Salisbury and T.S.: *Using rigged configurations to model  $B(\infty)$* . Sémin. Lothar. Combin., **78B.34** (2017), 12 pp.
- (11) Emily Gunawan and T.S.: *Realization of Kirillov–Reshetikhin crystals  $B^{1,s}$  for  $\widehat{\mathfrak{sl}}_n$  using Nakajima monomials*. Sémin. Lothar. Combin., **78B.47** (2017), 12 pp.
- (12) T.S.: *Rigged configurations of type  $D_4^{(3)}$  and the filling map*. Proceedings of FPSAC 2015, DMTCS. (2015)

#### Misc (Not Peer Reviewed)

- (1) Anatol N. Kirillov and T.S.: *Hook-content formula using excited Young diagrams*. [arXiv:1904.00371](https://arxiv.org/abs/1904.00371) (2019).
- (2) Chris Berg, Viviane Pons, T.S., Jessica Striker, and Christian Stump: *FindStat - the combinatorial statistics database*. [arXiv:1401.3690](https://arxiv.org/abs/1401.3690) (2014).