

ALGEBRAIC COMBINATORICS

Sami Assaf & Anne Schilling

Corrigendum: A Demazure crystal construction for Schubert polynomials

Volume 7, issue 5 (2024), p. 1601-1602.

<https://doi.org/10.5802/alco.400>

© The author(s), 2024.



This article is licensed under the
CREATIVE COMMONS ATTRIBUTION (CC-BY) 4.0 LICENSE.
<http://creativecommons.org/licenses/by/4.0/>

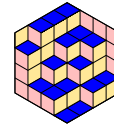


*Algebraic Combinatorics is published by The Combinatorics Consortium
and is a member of the Centre Mersenne for Open Scientific Publishing*

www.tccpublishing.org www.centre-mersenne.org

e-ISSN: 2589-5486





Corrigendum: A Demazure crystal construction for Schubert polynomials

Sami Assaf & Anne Schilling

ABSTRACT We give a corrigendum to our paper [4] entitled “A Demazure crystal construction for Schubert polynomials”.

1. INTRODUCTION

We provide a corrigendum to our paper [4], which cites preprint [1] for various definitions and results in [4, Section 5.2]. Preprint [1] was withdrawn from the arXiv, hence we point here to the correct published citations for the definitions and results needed in [4].

2. REFERENCE POINTERS FOR [4, Section 5.2]

Lift map: The lift map in [4, Section 5.2] needs to be replaced by the lift map in [2, Definition 4.22].

Drop map: The drop map in [4, Section 5.2] needs to be replaced by the drop map in [2, Definition 4.9].

Weak Edelman–Greene insertion:

- The definition [4, Definition 5.6] should cite [2, Definition 5.6]. The property that the column sorting map ϕ satisfies $\phi(\hat{Q}(\rho)) = Q(\rho)$, where ρ is a reduced expression, \hat{Q} is the recording tableau of weak Edelman–Greene insertion and Q is the recording tableau of Edelman–Greene insertion follows from [2, Theorems 5.4 and 5.11]. The reference to [3, Theorem 3.24] in the proof of [2, Theorem 5.11] should be [3, Theorem 2.21].
- The result [4, Theorem 5.7] is [2, Corollary 5.12].
- The citation [1, Theorem 2.4] in the proof of [4, Corollary 5.8] is [2, Proposition 2.6].
- The result [4, Corollary 5.9] is [2, Corollary 4.24].

Acknowledgements. AS was partially supported by NSF grant DMS-2053350. SA was partially supported by NSF grant DMS-2246785.

The authors are grateful to Eric Marberg and Elizabeth Milicevic for their comments.

Manuscript received 24th August 2024, revised 5th September 2024, accepted 6th September 2024.

KEYWORDS. Schubert polynomials, Demazure characters, Stanley symmetric functions, crystal bases.

REFERENCES

- [1] Sami Assaf, *Combinatorial models for Schubert polynomials*, 2017, <https://arxiv.org/abs/1703.00088>.
- [2] Sami Assaf, *A generalization of Edelman-Greene insertion for Schubert polynomials*, *Algebr. Comb.* **4** (2021), no. 2, 359–385, <https://doi.org/10.5802/alco.160>.
- [3] Sami Assaf, *Weak dual equivalence for polynomials*, *Ann. Comb.* **26** (2022), no. 3, 571–591, <https://doi.org/10.1007/s00026-022-00575-6>.
- [4] Sami Assaf and Anne Schilling, *A Demazure crystal construction for Schubert polynomials*, *Algebr. Comb.* **1** (2018), no. 2, 225–247, <https://doi.org/10.5802/alco.13>.

SAMI ASSAF, Department of Mathematics, University of Southern California, 3620 S. Vermont Ave.,
Los Angeles, CA 90089-2532, U.S.A.
E-mail : shassaf@usc.edu

ANNE SCHILLING, Department of Mathematics, UC Davis, One Shields Ave., Davis, CA 95616-
8633, U.S.A.
E-mail : anne@math.ucdavis.edu