

# Linus Setiabrata

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## Interests

Representation Theory, Algebraic Combinatorics.

## Education

2020 – **Ph.D. Mathematics**, University of Chicago.

2016 – 2020 **B.A. Mathematics**, Cornell University, *summa cum laude*.

## Honors

2020 Benjamin A. Blander Prize in Mathematics, University of Chicago.

2020 Harry S. Kieval Prize in Mathematics, Cornell University.

## Publications

8. Karola Mészáros, Linus Setiabrata, Avery St. Dizier, *An orthodontia formula for Grothendieck polynomials*. [arXiv:2011.13855](https://arxiv.org/abs/2011.13855). Trans. AMS, accepted.
7. Linus Setiabrata, *Faces of root polytopes*. [arXiv:2001.05191](https://arxiv.org/abs/2001.05191). SIAM J. Disc. Math., accepted.
6. Karola Mészáros, Linus Setiabrata, *Lorentzian polynomials from polytope projections*. [arXiv:1912.01651](https://arxiv.org/abs/1912.01651). Algebr. Comb., accepted.
5. Sergey Fomin, Linus Setiabrata, *Heronian friezes*. Int. Math. Res. Not. IMRN, **1** (2021): 648–694.
4. Kabir Kapoor, Karola Mészáros, Linus Setiabrata, *Counting integer points of flow polytopes*. [arXiv:1906.05592](https://arxiv.org/abs/1906.05592). Disc. Comput. Geom., accepted.
3. Alexander Black, Sabri Cetin, Florian Frick, Alexander Pacun, Linus Setiabrata, *Fair splittings by independent sets in sparse graphs*. Israel J. Math, **236** (2020): 603–607.
2. Jai Aslam, Shujian Chen, Florian Frick, Sam Saloff-Coste, Linus Setiabrata, Hugh Thomas, *Splitting loops and necklaces: Variants of the square peg problem*. Forum Math. Sigma, **8** (2020): e5.
1. Jai Aslam, Shuli Chen, Ethan Coldren, Florian Frick, Linus Setiabrata, *On the generalized Erdős–Kneser conjecture: proofs and reductions*. J. Combin. Theory, Ser. B, **135** (2019): 227–237.

## Talks

4. [Cornell Discrete Geometry and Combinatorics Seminar](#), Cornell University, Jan 2020.
3. [Undergraduate Math Club](#), Cornell University, Nov 2019.
2. [Undergraduate Math Club](#), Cornell University, Feb 2019.
1. [Undergraduate Math Club](#), Cornell University, Mar 2018.

## Professional Service

Referee for Annals of Combinatorics.

## Other Activities

Fall 2018 – Spring 2020 Organized weekly talks for the Cornell Undergraduate Math Club.

## **Teaching Experience**

### **Cornell:**

Fall 2018 – Fall 2019 Math Tutor at the Math Support Center.

Spring 2018 Grader for MATH 2240 - Theoretical Linear Algebra and Multivariable Calculus II.

Fall 2017 Grader for MATH 2230 - Theoretical Linear Algebra and Multivariable Calculus I.

(Last updated July 16, 2021.)