

# Juan Diego Rojas — CV

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## Education

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**Universidad de los Andes**

*B.Sc. in Mathematics*

**Bogotá, Colombia**

2018

**Universidad de los Andes**

*M.Sc. in Mathematics*

**Bogotá, Colombia**

2020

- Advisor: Paul Bressler.

**Northwestern University**

*Ph.D. in Mathematics*

**Evanston, United States**

Fall 2021-Present

- Advisors: Boris L. Tsygan and Daniil Rudenko.

## Research interests

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- algebraic geometry and number theory broadly interpreted; and specifically
- periods of mixed Tate motives and their appearances e.g. volumes of hyperbolic manifolds, Drinfeld associators, formality of the little disks operad, multiple zeta values, deformation quantisation, regulators...
- cohomology of the moduli space of curves and abelian varieties, particularly non-tautological cohomology.
- applications of Hodge theory.

## Research

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Publications.....

- (with Paul Bressler). On the classification of symplectic DQ-algebroids. *Theory Appl. Categ.*, Paper No. 3, 64–100 (2022). <http://www.tac.mta.ca/tac/volumes/38/3/38-03.pdf>
- (with Santiago Arango-Piñeros). The global field Euler function. *Research in the Mathematical Sciences*, vol. 7, no. 3 (2020). <https://doi.org/10.1007/s40687-020-00218-3>

## Skills

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- Native Spanish, fluent in English, intermediate French.
- Python, R,  $\LaTeX$ , Git.

## References

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**Boris L. Tsygan**

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Professor

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**Daniil Rudenko**

Department of Mathematics

Assistant Professor

University of Chicago

Chicago, United States

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**Ben Antieau**

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