

## EDUCATION

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### University of Oxford

DPhil in Mathematics, Advisor: Dominic Joyce

2018–Current

### University of Vienna

M.Sc. in Mathematics

2017–2018

- Thesis: “Stability conditions on quivers and semistable noncommutative curve counting”, <http://othes.univie.ac.at/52820/>, supervised by Ludmil Katzarkov

### University of Vienna

M.Sc. in Physics

2016–2018

- Thesis: “Geometry of Twisted D-branes in Group Manifolds”, <http://othes.univie.ac.at/53874/>, supervised by Stefan Fredenhagen

### University of Vienna

B.Sc. in Physics

2013–2016

- Thesis: “Lovelock Theory”, supervised by Piotr Chrusciel

## PUBLICATIONS AND PREPRINTS

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- [1] A. Bojko, *Wall-crossing for zero-dimensional sheaves and Hilbert schemes of points on Calabi–Yau 4-folds*, 2021. arXiv: 2102.01056.
- [2] A. Bojko, *Orientations for DT invariants on quasi-projective Calabi–Yau 4-folds*, 2020. arXiv: 2008.08441.
- [3] A. Bojko and G. Dimitrov, *Non-commutative counting and stability*, 2019. arXiv: 1911.00074.

## TEACHING

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- **Tutor** at the University of Oxford  
*String Theory I* Hilary 2021
- **Tutor** at the University of Oxford  
*String Theory I* Hilary 2021
- **Tutor** at the University of Oxford  
*C2.4 Infinite Groups* Michaelmas 2020
- **Tutor for Merton College** at the University of Oxford  
*ASO: Projective Geometry* Trinity 2020
- **Teaching assistant** at the University of Oxford  
*C3.1 Algebraic Topology* Michaelmas 2018
- **Teaching Assistant** at the University of Oxford  
*B2.1 Introduction to Representation Theory* Michaelmas 2018

## RESEARCH INTERESTS

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- DT invariants in Calabi–Yau 4-folds
- Wall-crossing of invariants
- Non-commutative geometry

## LANGUAGES

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- **Russian** native
- **Czech:** native
- **English:** fluent, TOEFL 119/120
- **German:** fluent, C2 Wirtschaftssprache Deutsch

## SCHOLARSHIPS AND AWARDS

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- Clarendon Scholarship at the University of Oxford 2018–2021
- Department of Physics Dean's list (Master's) 2016–2018
- Performance scholarship of the University of Vienna 2013–2017

## TALKS

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- Hilbert schemes for fourfolds and Quot-schemes for surfaces, Geometry Analysis seminar - Oxford, April 2021.
- Wall-crossing for Hilbert schemes on fourfolds and Quot-schemes on surfaces, UCSD Algebraic Geometry Seminar, April 2021
- Wall-crossing for Hilbert schemes on CY 4-folds II, Algebraic geometry and moduli seminar- ETH, March 2021.
- Wall-crossing for Hilbert schemes on CY 4-folds I, Algebraic geometry and moduli seminar- ETH, March 2021.
- Computing with virtual fundamental classes of Hilbert schemes on Calabi–Yau 4-folds, Online Calf Seminar, December 2020.
- Orientations for DT invariants on quasi-projective Calabi–Yau 4-folds, Algebraic geometry seminar - Nottingham, November 2020.
- Orientation on the moduli stack of compactly supported perfect complexes over a Calabi–Yau 4-fold, Oxford-London Gauge Assembly, August 2020
- Orientation problem for DT invariants on open Calabi–Yau 4-folds, Hausdorff Center for Mathematics, February 2020
- Non-commutative counting and stability, University of Warwick, Summer-school on Bridgeland stability conditions, December 2019
- Non-commutative counting and stability, University of Oxford, Junior Geometry and Topology Seminar, November 2019
- Orientation on moduli spaces of sheaves on a non-compact Calabi–Yau 4-fold, University of Vienna, Geometry and Mathematical Physics Seminar, November 2019
- Lovelock theory, University of Vienna, Gravitational Physics Seminar, June 2016