

# Hana Melánová

## Curriculum Vitae

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### Personal Information

Date of Birth August 9, 1993  
Place of Birth Znojmo, Czech Republic  
Nationality Czech  
Marital Status Married

### Education

2017 – 2020 **PhD in Mathematics.**  
UNIVERSITY OF VIENNA, Faculty of Mathematics, Austria  
2015 – 2016 **Master of Science in Mathematics.**  
UNIVERSITY OF VIENNA, Faculty of Mathematics, Austria  
2012 – 2015 **Bachelor of Science in Mathematics.**  
UNIVERSITY OF VIENNA, Faculty of Mathematics, Austria  
2008 – 2012 **High School.**  
Gymnázium a Střední odborná škola pedagogická, Znojmo, Czech Republic

### Scholarships

2018 – 2020 ÖAW Doc Fellowship, Austrian Academy of Sciences, Project FA506081, Austria  
2015 – 2016 Research Scholarship for Master Students, University of Vienna, FWF Project 25652, Austria  
2013 – 2017 Scholarship of excellence (Leistungsstipendium), University of Vienna, Austria

### Awards and Honors

2017 Würdigungspreis - award of excellence given to the 50 best university graduates in Austria by the Federal Ministry of Education and Science, Austria

### Research experience

2021 – present Employment in the research project *Special L-values and p-adic L-functions*, University of Vienna, START-Project Y966, Austria  
2018 – 2020 Employment in the research project *Artin Approximation, Arc Spaces and Resolution of Singularities*, University of Vienna, FWF Project 31338, Austria

- 2018 – 2020 Employment in the research project *Resolution of Singularities via Geometric Invariants*, University of Vienna, Project FA506081, Austria
- 2018 – 2018 Employment in the research project *Algebra of 3-dimensional Motions*, Johannes Kepler University Linz, FWF Project 31061, Austria
- 2015 – 2018 Employment in the research project *Resolution of Singularities*, University of Vienna, FWF Project 25652, Austria

## Scientific Activities

- September 2020 Participant in the *VSM Summer School*, Techendorf am Weißensee, Austria
- July 2020 Participant in the *ISSAC 2020* (online), Kalamata, Greece
- March 2020 Participant and speaker in the *VSM Retreat*, Yspertal, Austria
- October 2019 Participant and speaker in the *Workshop on Singularities: Semigroups, Topology and Valuations*, Madrid, Spain
- September 2019 Participant in the *VSM Summer School*, Techendorf am Weißensee, Austria
- June 2019 Participant in the *Workshop on Nash Blow-up and Simple Tower, II*, Leuven, Belgium
- December 5, 2018 Speaker in the *PhD Colloquium*, University of Vienna, Austria
- September 2018 Participant and Presentation of Poster in the *Heidelberg Laureate Forum*, Heidelberg, Germany
- September 2018 Participant in the *VDS Summer School*, Techendorf am Weißensee, Austria
- September 2018 Participant and speaker in the *Joint Meeting of the Czech, Slovenian, Austrian, Slovak and Catalan Mathematical Societies*, Bratislava, Slovakia
- March 2018 Participant in the *VDS Retreat*, Zwettl, Austria
- February 5, 2018 Speaker in the *Algebraic Geometry Seminar*, Universidad Autónoma de Madrid, Spain
- September 2017 Participant in the *Interscience - 1st symposium of the Vienna Doctoral Schools*, Vienna, Austria
- May 2017 Participant and speaker in the workshop *Resolution of Singularities - New resolution Methods*, Vienna, Austria
- April 2017 Participant and speaker in the *VDS Retreat*, Strobl, Austria
- February 24, 2017 Speaker in the *Algebra Seminar*, University of Barcelona, Spain
- September 2016 Participant in the *VDS Summer School*, Obergurgl, Austria
- January – June 2016 Participant in the *NaturTalente - das High Potential Programm*, Austria
- February 2015 Participant in the workshop *Applications of Artin approximation in Singularity Theory*, Marseille, France
- February 2015 Participant in the conference *Young researchers in Singularities*, Marseille, France
- January 2015 Participant in the doctoral course *Introduction to Artin Approximation and the Geometry of Power Series Spaces*, Marseille, France

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## Teaching Activities

Fall Semester 2018 Lectures at the College of Education Burgenland, Austria

Fall Semester 2017 Lectures at the Faculty of Mathematics and Faculty of Physics at the University of Vienna, Austria

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## Languages

Czech (native), German (fluent), English (fluent)

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## Publications

- [1] Hana Melánová and Sergey Yurkevich: *On the First Fundamental Theorem for  $GL_2(K)$  and  $SL_2(K)$* , 2020, submitted, arXiv:2009.08904
- [2] Hana Melánová: *Geometric Invariants of Plane and Space Curves*, 2020, submitted, arXiv:2010.16415
- [3] Hana Melánová: *Resolution of Singular Algebraic Curves via Geometric Invariants*, 2021 submitted
- [4] Hana Melánová: *Geometric Invariants for the First Fundamental Theorem for  $GL_n(\mathbb{C})$* , 2021, preprint