Nastassia Grimm | Curriculum Vitae

PhD Candidate in Theoretical Astrophysics and Cosmology
Center for Theoretical Astrophysics & Cosmology, University of Zurich
Winterthurerstrasse 190, 8057 Zurich, Switzerland

📞 +41 44 63 56689   ✉ ngrimm@physik.uzh.ch   🖥 www.ics.uzh.ch/~ngrimm

Personal Information

Date of birth	May 1994
Nationality	German

Research Fields & Activities

Main expertise	General relativistic effects, large scale structure, cosmological perturbation theory; Cosmological observables, weak gravitational lensing, galaxy clustering
Further interests	CMB, inflationary physics, modified gravity, applications of machine learning
Related activities	Teaching at Bachelor and Master level, conference and seminar talks, referee work for MNRAS and JCAP

Education

Since Sept. 2017	**PhD student**, *Center for Theoretical Astrophysics and Cosmology, University of Zurich*, Zurich, Switzerland. Supervisor: Prof. Dr Jaiyul Yoo Thesis title: "General relativistic effects in cosmological weak lensing" Expected graduation date: August 2021
Sept. 2015 – Sept. 2017	**MSc**, *ETH Zurich*, Zurich, Switzerland. Master of Science in Applied Mathematics; Area of application: Theoretical Physics Graduated with total grade 5.57 (best possible: 6.0; lowest passing grade: 4.0)
Sept. 2012 – Sept. 2015	**BSc**, *University of Zurich*, Zurich, Switzerland. Bachelor of Science in Mathematics, with Physics as a minor subject Graduated with total grade 5.5 (best possible: 6.0; lowest passing grade: 4.0) Total grade major subject: 5.4; Total grade minor subject: 5.8
Summer 2012	**University entrance diploma**, *BRG Innsbruck*, Innsbruck, Austria. Passed the matriculation examination (Matura) with total grade 1.0 (best possible).

Experience in Teaching Science & Programming

Since Fall 2017	Teaching assistant at the University of Zurich as a part of the PhD program. Lectures: "The Universe","Introduction to Astrobiology", "Theoretical Astrophysics", "Theoretical Cosmology" and "Introduction to Astrophysics"
Fall 2015 and 2016	Teaching assistant at the ETH Zurich for "Analysis III" for students of electrical engineering
Spring 2015	Teaching assistant at the ETH Zurich for "Analysis II" for students of mathematics and physics

Fall 2013	Teaching assistant at the University of Zurich for "Programming for Mathematicians" (programming language: Java)

Conference and Seminar Talks

6 February 2018	Presentation on "Jacobi Mapping Approach for a precise Cosmological Weak Lensing Formalism" at the Swiss Cosmology Days 2018, CERN
12 June 2020	Presentation on "Galaxy Power Spectrum in General Relativity" at the workshop on "Impact of relativistic effects on searches for non-Gaussianity with two-point functions" at CERN
June – Nov. 2020	Seminar talks on "Galaxy Power Spectrum in General Relativity" at - CERN, Theory Department (11 June 2020) - University of Lisbon, Institute of Astrophysics and Space Sciences (24 June 2020) - California Institute of Technology (6 October 2020) - University of Cambridge, Institute of Astronomy (12 October 2020) - University of Oxford, Department of Physics (10 November 2020) - Princeton University / Institute for Advanced Study (30 November 2020)

Achievements at Mathematical Competitions

2010 – 2012	Qualified for and participated at the Austrian national competition of the mathematical olympiad
2012	Qualified for the international mathematical olympiad (IMO) with the 5th place at the national competition
	Awarded a bronze medal at the 53th IMO in Mar del Plata (Argentina)
2011	Qualified for and participated at the 5th Middle European Mathematical Olympiad in Varaždin (Croatia)
2007	Achieved the 3rd place of all Austrian participants in the "Mathematical Kangaroo" (age grade 7)

IT Skills

Mathematica	Highly experienced; applied for numerical evaluations in own research work
Matlab	Advanced knowledge, including applications in machine learning (completed online course by Stanford University)
Java	Completed a respective university course in 2012 with grade 6.0; Teaching assistant for the same course in the year 2013
Python, C++	Basic knowledge

Languages

German	Native speaker
English	Fluent (level C2, certified by the "Cambridge Certificate in Advanced English")
Russian	Intermediate
French	Basic