

# LAXMAN KANAGARATNAM

University of Vienna — Department of Astrophysics

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## EDUCATION

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### University of Vienna

- BSc Physics 2025–present  
Enrollment date: 01.10.2025  
Expected graduation: 30.06.2027  
Completed: 141/180 ECTS

- BSc Astronomy 2024–present  
Enrollment date: 01.03.2024  
Expected graduation: 30.06.2026  
Completed: 167/180 ECTS

### Other Education

- MIT OpenCourseWare Physics Lectures 2025–present  
Self-study; used to compensate for course schedule conflicts

## RESEARCH

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### Alves Lab, University of Vienna 2025–present

- Bachelor thesis on the large-scale structure in the Vela region using Gaia DR3. Applying the SigMA clustering algorithm developed by Sebastian Rattenböck to identify and characterise stellar groups.
- Supervised by: Alena Rottensteiner (PhD Student, University of Vienna)
- Implemented in Python and maintained openly on GitHub.

## TEACHING

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### Teaching Assistant, University of Vienna 2026

- Teaching Assistant for Dynamics and Thermodynamics supervised by Prof. Kristina Kislyakova and Prof. Glenn van de Ven

### Teaching Assistant, Veterinary University of Vienna 2025

- Teaching Assistant for Medical Physics Laboratory supervised by Dr. Olga Jovanovic

### Teaching Assistant, ETH Zürich 2023

- Teaching Assistant and Senior Coach for Analysis I supervised by Prof. Alessio Figalli and Dr. Alexander Caspar

## VOLUNTEER EXPERIENCES

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### Academic Community Contributions 2024–present

- Provide detailed semester summaries and exam-preparation notes to the BSc Physics and BSc Astronomy student groups each term, widely used and appreciated by many students.

### aCentauri Solar Racing Team at ETH Zurich 2023

- Competitor in the Bridge Stone World Solar Challenge 2023

### **Physics I Formula Compendium at ETH Zurich**

2023

- Co-developed the official LaTeX formula compendium for Physics I supervised by Prof. Werner Wegscheider

### **Matura Project Exhibitor at the University of Basel**

2020

- Presented Matura Project at the Saturday Morning Physics Event supervised by PD Dr. Matthias Liebendörfer

## **TECHNICAL EXPERIENCE**

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- Python (NumPy, matplotlib, pandas, Astropy), Jupyter, LaTeX, GitHub
- TOPCAT, Simbad, Muniwin, VStar, Minima27

## **EXTRACURRICULARS**

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- Private tutor for mathematics and physics
- Former teacher and member of the Chess Club Therwil