



# BASSEL FARHAT

## PROFILE

Astrophysicist with strong theoretical background and a passion for coding.

Specialized in running magnetohydrodynamic simulations and in physical interpretation and statistical analysis of data, experienced with coding in multiple languages most notable Python.

Fast learner. Highly motivated to work in a team.

## SKILLS

Python 3+ yrs

Linux 2+ yrs

FORTRAN 1+ yrs

IDL 1+ yrs

Matlab 1+ yrs

## WORK EXPERIENCE

Research project under the supervision of Prof. Dr. Robi Banerjee

March - July 2020

Performing Initial simulations for the thesis

Gained skills: Running numerical simulations on a remote cluster.

Master thesis under the supervision of Prof. Dr. Robi Banerjee

July 2020 - NOW

Density Perturbation from Primordial Magnetic Fields

Gained skills: Performing simulation using the MHD code : Flash.  
Outcome: Two papers to be published in 2021

Student Assistant

April 2020 - NOW

Introduction to Astronomy 1-2

## EDUCATION

2019 - 2021

M. Sc. Physics.

Universität Hamburg

Main thematic priority of the master studies was Astrophysics with main interest on the theoretical studies of stellar evolution and star formation. Besides stellar studies, I also enjoyed studying experimental courses such as applications of general relativity and astro-particle physics.

The topic of my master thesis was density perturbations in primordial magnetic fields. I performed 3D magnetohydrodynamic simulations to find out the upper limits on density fluctuations and to monitor heating during different cosmological epochs.

Some relevant modules (grade):

Cosmology (1.7)

Chemical Evolution of the Universe (1.7)

Experimental Astroparticle Physics (1.3)

## CONTACT

📍 Kaemmererufer 14  
22303 Hamburg

📞 +49 151 424 93 567

✉ farhatbassel@tutanota.com

## LANGUAGES

Arabic	native
English	advance
French	bilingual
German	advance

## CERTIFICATES

- Python for Data Science and Machine Learning Bootcamp
- Machine Learning with Python freeCodeCamp

2014 - 2017

**B. Sc. Physics.**

Lebanese University, Fanar, Lebanon

## ADDITIONAL SKILLS

### Online Classes

I stay up to date with the fast evolving coding languages by taking online courses. For physics I read online journals such as MNRAS and the Astrophysical journal in addition to the online studies.

### Leadership

Class representative during Bachelors

## REFERENCES

### Prof. Dr. Robi Banerjee

University of Hamburg

Gojenbergsweg 112

21029 Hamburg

Germany

Tel.: +49 40 42838-8404

Email: banerjee@hs.uni-hamburg.de

### Dr. Pranjal Trivedi

University of Hamburg

Gojenbergsweg 112

21029 Hamburg

Germany

Tel: +49 40 42838-8405

Email: pranjal.trivedi@hs.uni-hamburg.de