

STATEMENT OF PURPOSE

My name is **Harsh Bellam** from India. I am applying for the **Master's program in Physics at FAU Erlangen**. This letter serves to express my enthusiasm for participating in this program. My academic background, motivations, and career aspirations are detailed in this letter.

I pursued a **Bachelor of Science in Physics** at Sathyabama Institute of Science and Technology, Tamil Nadu, India. There I maintained a **CGPA of 8.73** until my fifth semester. The subjects I studied were Mechanics and Properties of Matter, Thermal and Statistical Physics, Electrical Circuits and Networks, and Electricity & Magnetism. Before this, I finished my Senior School Certificate Exam in 2021 (CBSE) where I got a 93.8%. In 2019, I passed the All-India Secondary School Exam with an 89.6% score, under the Central Board of Secondary Education. In 2024, I took the **IELTS and scored 7.0 overall (C1)**. My scores were 7.5 in Listening, 7.0 in Reading, 7.0 in Writing, and 7.0 in Speaking.

I was placed second in the **Ultimate Badminton Battle at the SMASH SHOWDOWN** on 20.03.2024. Additionally, I **interned at VEI TECHNOLOGIES PVT LTD**, Tamil Nadu, from 15.06.2023 to 28.06.2023. I worked with sci.AI, a platform that analyses biomedical research papers using semantic graphs. Also, I completed my bachelor project named **"Growth, Characterization and Analysis of Single In-Organic Crystals Exhibiting Non-Linear Optical Properties"** from 12.2023 to 04.2024. It involved analysing Potassium tetra-borate crystals (K₂B₄O₇) by using the slow evaporation approach. I also did my All-India Secondary School Exam in 2019 where I got an 89.6%. Both were under the Central Board of Secondary Education (CBSE), India.

I want to take this course as I want to understand the basics of the universe. My earlier studies gave me a strong base in physics. I am willing to delve deep into advanced topics in astrophysics and astroparticle physics. I'll also cover condensed matter and optical sciences, life sciences, and theoretical physics. The Master's program at FAU Erlangen offers a full curriculum that includes modules on Astrophysics and Astroparticle Physics, Condensed Matter Physics, Optical Sciences, Physics in Life Sciences, and Theoretical Physics. This program will boost my theory knowledge and will also provide the skills I need for a successful career in research and academia. I see myself contributing to top research institutions or I working with space agencies like ESA or NASA. There, I can join groundbreaking projects that push the limits of our understanding of the cosmos.

Germany is famous for its excellent science and education. This is especially true for physics. The country is home to some of the world's best research institutions and universities. It ranks among the top five countries in the Global Innovation Index. Germany invests heavily in research and development as it allocates over €100 billion each year. This fosters an environment where science and technology thrive. Moreover, Germany hosts over 370,000 international students. This reflects its commitment to providing a diverse and inclusive academic environment. The country has a rich history in physics. Luminaries such as Albert Einstein and Max Planck were part of it further showing the country's significant contributions to the field.

FAU Erlangen has a strong focus on research and its global reputation. It ranked 229th in the QS World University Rankings (2024) and also 12th in Germany. It stands out as a leader in science education. The university is committed to best-in-class research and innovation with an interdisciplinary approach. This provides an ideal environment for aspiring physicists. Also, learning from great faculty and working with diverse peers will enrich my studies.

In conclusion, I am eager to join the Master's program in Physics at FAU Erlangen. I want to deepen my understanding of the universe and add to physics. I am sure that the program's curriculum and the university's great resources will give me the knowledge and skills necessary for me to achieve my academic and career goals. Thank you for considering my application.

Sincerely,

Harsh Bellam