My name is Aleksandra Rabeda and I am currently studying Master's degree in Physics at Aarhus University.
I started working with Professor Dainotti in 2021, when I was studying at the Jagiellonian University, I did a student internship with her and I am part of her team to this day.

Working under Prof. Maria Dainotti has been a significant step in my academic and professional development, particularly in the areas of research, programming, and data analysis.
Throughout our collaboration, I was able to build and refine my coding skills, as well as deepen my understanding of complex phenomena in high-energy astrophysics, specifically Gamma-Ray Bursts (GRBs).
One of the key projects I contributed to was focused on GRB redshift estimation using machine learning, which led to the submission of a research paper titled GRB Redshift Estimation using Machine Learning and the Associated Web-App.
This project allowed me to combine cutting-edge technology with theoretical physics, a learning opportunity I greatly appreciate.

Under prof. Dainotti's guidance, I also gained invaluable experience in the broader scope of scientific research.
This included not only the technical skills required for such a project, such as developing machine learning models and creating a web-based application but also an understanding of how to conduct research at an international level.
Working within a global team helped me learn how to communicate and collaborate across time zones and cultures, giving me a well-rounded view of scientific work in a real-world context. Perhaps one of the most important aspects of this experience was seeing firsthand what professional research looks like, from the initial stages of formulating a hypothesis to presenting findings and contributing to scientific knowledge.
While challenging, the experience gave me a deeper respect for the rigors of scientific inquiry and the collaborative efforts required to bring complex projects to fruition.
The skills I developed during this time, particularly in programming and research methodology, will undoubtedly be of great benefit in my future endeavors.

Overall, working with Prof. Dainotti has helped me grow as both a researcher and a programmer and has provided me with the practical experience necessary to continue pursuing a career in high-energy physics and beyond.

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