

## **Testimonial Letter: Dr. Maria Dianotti**

From my early academic years, I have been deeply fascinated by the correlations studied in astrophysics, often marvelling at the fact that these fundamental relations—taught in graduate school—were first uncovered by some of the brightest minds in the field. My research focuses on high-energy astrophysics, particularly Gamma-Ray Bursts (GRBs), and during my first year of PhD, I came across the Dainotti correlation. I was captivated by its significance and the depth of research behind it, and I aspired to one day meet and learn from the brilliant scientist behind it, Prof. Maria Dainotti. Little did I know that this opportunity would come much sooner than expected.

Maria had posted about her projects on LinkedIn, where I had been following her work with keen interest. Initially, I reached out for one of the opportunities, but the position was already filled. However, when she announced another project, I applied again—and to my delight, this time, I received a response from both Maria and her student, Biagio, whom I later came to know as a great friend and collaborator.

I began working with Maria in December 2024, marking my first foray into cosmological studies. This collaboration introduced me to an entirely new research approach, mentorship style, and academic culture. Her group operates with incredible energy and enthusiasm, functioning across multiple time zones with a relentless dedication to discovery. The synergy within the team is remarkable; despite our diverse backgrounds and nationalities, everyone is approachable, supportive, and eager to share ideas.

Maria fosters an engaging and dynamic research environment. She often lightens the mood during meetings while maintaining exceptionally high standards of work. Her enthusiasm is infectious; I even affectionately referred to her as the "Asian Wonder Woman"—a testament to the remarkable impact she has had on my academic journey.

Working with Maria has been an intense but rewarding experience. Her speed, precision, and dedication to the project set a high bar, challenging us all to match her enthusiasm and commitment. At times, the pace felt overwhelming, but as I immersed myself in the work, I realised how truly engaging and fulfilling this research was. We not only completed our tasks diligently but actively sought new challenges, revisiting our analyses and refining our contributions with greater rigour.

This collaboration has profoundly shaped my growth as a researcher. It has bridged gaps in my understanding, allowing me to connect high-energy astrophysics with cosmology in ways I had not previously explored. I am incredibly grateful to Maria for this opportunity, and I look forward to continuing this journey in my postdoctoral research and beyond—if given the chance, I would be honoured to keep working alongside her.

Additionally, if there are opportunities to delve deeper into Quasar/GRB cosmology or astrophysical jets, I would appreciate any connections you could facilitate with fellow students currently tackling this area.

**Ayush Garg**

A handwritten signature in blue ink, appearing to read 'Ayush Garg', with a stylized flourish at the end.