

# Personal Statement

Nature, with all its mesmerizing spectrum of phenomena, constantly motivates my curiosity and inspires my research. I draw personal enjoyment from problem solving, developing different theoretical and numerical approaches to address an issue. In particular, I am fascinated by the Universe's apparent ability to produce numerous types of efficient particle accelerators. One the centerpins of my current research are cosmic ray particles and their gamma-ray signatures.

Part of being at the forefront of Science is the contribution to the diffusion of our present understanding of Nature, achieved through teaching and outreach activities. My pedagogical approach is to “keep it simple”, a principle I have applied in all aspects of my teaching by encouraging students (undergraduate and graduate) to play with the mathematics and physics of a problem through the construction of either a numerical or analytical model which has been reduced so as to capture the essence of a given system. Additionally, I am committed to engage the public at large, having provided outreach events and talks throughout my career.

During the past decade I have had the great opportunity to work at 3 internationally renowned astrophysical institutes (MPIK, University of Geneva and DIAS), specialising in the area of high energy astrophysics. My personal ambition is to take the expertise I have gained in the understanding of cosmic ray acceleration, energy loss processes, and gamma-ray astronomy, to spearhead the next generation of science in the field. The position for assistant professor at the Department of Physics and Astronomy at UCLA represents an exciting professional opportunity, both in research and teaching. Particularly attractive features are the Department's rich ensemble of committed scientists and students, diverse range of complementary research areas and the enthusiastic collaborative spirit between groups. It is no surprise that the Department is ranked so highly. Being part of such a highly regarded institution would offer me a unique chance to further develop my career in astrophysics while contributing to the various areas involved in my research.