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To whom it may concern,
Irish Research Council.

This is in support of a proposal for Graduate Education in Space Science and Astrophysics submitted to the IRC under the auspices of the Exploratory Grants programme.

I am writing this letter from the perspective of an Irishman who has been actively involved in science research and education within Europe and the U.S.A. for the past 35 years. Recently, I was Director of Leiden Observatory, a leading European university astronomy department and Chairman of visiting committees for several large scientific organisations. Presently, I am a Royal Netherlands Academy Professor and Vice President of the International Astronomical Union. I have neither lived in Ireland since 1963, nor do I have collaborations with Irish scientists that could be regarded as posing a conflict of interest.

Let me begin by pointing out that there are profound reasons for funding astronomical research besides that of supporting a fundamental area of curiosity-driven research. The benefits that astronomy provides in stimulating technological development, education and culture are profound aspects that must be taken into account. Astronomy is a unique discipline because of its combined cultural, human and scientific aspects. On the one hand astronomy drives the development of advanced technology, such as the most sensitive detectors of light and radio waves and the fastest computers. On the other hand the astronomer is the ultimate historian who delves much deeper into the past than conventional historians. Because astronomy is one of the most fascinating and approachable sciences, it can play a unique role in attracting young people to embark on a career in natural sciences and technology. This consideration is particularly important for Ireland at present. It is my experience that a strong national programme of astronomical research and education is an important factor in exciting children and stimulating their interest in technology. The public can identify more easily with discoveries made or explained by researchers from their own country.

Funding of astronomy in Ireland has not kept pace with economic growth. Relative to its GNP astronomy funding in Ireland is amongst the lowest in Western Europe. This is unfortunate. Although astronomy is a relatively expensive science, for the reasons stated above, it gives good value for money.

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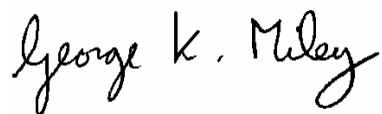
Because I am convinced that that more attention to astronomical research would be beneficial for Ireland, I was delighted to read the present proposal. As Director of the astronomy department at Leiden, I helped set up a similar research school in astronomy in the Netherlands 15 years ago. The Netherlands Research School in Astronomy (NOVA) has been a great success, not only because it has provided a national and international component in the education of our postgraduate students, but also because it has played a role in enhancing the image of science among the public. Dutch astronomy has flourished during the past decade, partly due to the presence of NOVA.

The graduate research school outlined in the present proposal could be a first step in giving Irish astronomy a much-needed boost. The requested funding is reasonable for the tasks described. Such a graduate research school would improve the research environment for Irish postgraduate students in astronomy and space science by providing complementary expertise from the various participating institutes. I have no doubt that it would also stimulate research collaborations and help attract excellent students and visiting scientists from abroad.

Because of the multidisciplinary nature of modern astronomy there would be many opportunities for collaboration between the proposed research school in Space Science and Astrophysics and other disciplines. Besides astrophysics, astrochemistry and astrobiology are exciting fields of modern science, dealing with such fundamental topics as the origin of life. The requirements of observational and theoretical astrophysics have pushed technology to its limits in driving the development of large supercomputers, sensitive detectors and accurate clocks. The existence of such a graduate school could be an important catalyst in stimulating the development of equipment in Ireland for large facilities, such as those of the European Space Agency.

I strongly endorse this proposal.

Yours sincerely,

A handwritten signature in black ink that reads "George K. Miley". The signature is written in a cursive, flowing style.

Professor G. K. Miley,
Royal Netherlands Academy Professor