

From Prof. R.F. Griffin

**Institute of Astronomy, The Observatories, Madingley Road, Cambridge CB3 0HA**

12 April 2012

The Vice-Chancellor.

Dear Sir Leszek,

I am writing to appeal for your support and influence to avert the demolition of the computer room associated with the dome of the 36-inch telescope at the Institute of Astronomy. I enclose a picture (taken from the Institute's web site) of the dome; the room concerned is the extension on the right. There is an intention to build another building so close to the dome that that room will "have to be" demolished. The building concerned is billed on the tentative University map as "Experimental Astronomy", but as far as I know it will be bringing no instrumentation; instead, by being built where it is presently planned to go, it will severely hamper the one observational project that is carried out here.

The reason for my concern is that I am in effect the sole user of the 36-inch telescope. This Department used to be oriented towards observation, but after The Observatories were amalgamated with Hoyle's Institute of Theoretical Astronomy I am afraid that observation (at least on-site) ceased to be regarded with much favour, and students are brought up to believe that such work is possible only on glamorous trips to places like Hawaii.

I came to the Department as a graduate student in 1957 and have been here ever since, loyally serving the University for 55 years. I cannot say that my loyalty has been reciprocated. This is the tenth year since my dismissal ('retirement'), but I have continued to work exactly as before. In the ten years I have published nearly a hundred research papers in the refereed journals, while effectively making the University a gift in kind of about half a million pounds in saved employment costs. In the 1960s I developed at the 36-inch telescope a method of measuring the motions of stars, which has since been adopted worldwide and has been responsible for much of what is known about such diverse objects as black holes and extra-solar planets. I continue to use the technique here, and have single-handedly kept the University Observatories on the map as an active observational site for some thirty years.

A large proportion of the data that underlie my research papers is obtained right here at the 36-inch telescope, so it seems inexplicable to me that I have at no time been consulted on the very damaging building proposals that clearly are of acute concern to me. I enclose printers' proofs that have just come in of two of my papers currently in press. Of course I am not expecting you to read them in detail, but I believe you could easily see from them that serious work goes on at the local telescope. The 172-page proof represents a new instalment of what amounts to nearly a lifetime's work on the Hyades star cluster, and a substantial proportion of the underlying data has been obtained here at the 36-inch telescope. The smaller paper is no. 224 in a series that has been running since 1975 in every issue of the journal concerned, which comes out every two months, and has attracted favourable international attention. Almost all of the data upon which the paper is based have come from the local telescope.

I do in fact use the 36-inch telescope almost all the time that the sky is clear at night. I have observed on 37 nights so far this calendar year; the average is about 140 nights a year, a number limited by the weather. It might be argued that I am old and may give up any day now, so the telescope has no future, but I could claim to remain in tolerably good health and have no intention of giving up at all soon. I am still very willing to work all night until it gets light in the morning, and despite having been dismissed from my University post for being too old I still run the London Marathon every year (I have three times been second in my age group since I turned 70).

Buildings near astronomical telescopes are not an advantage, because they produce light pollution and – often worse – stir up the air by convection currents driven by many kilowatts of heating. All the same, more and more buildings have been put up near the 36-inch dome. They are in the

form of three sides of a rectangular courtyard (see maps). It is now proposed to build another one that, instead of forming (part of) the fourth side of the rectangle, as reason would suggest, seems to be deliberately angled out at an angle that is obtuse in every sense of the word, as if it were a point of principle to make the building impinge on 'my' dome. 'Insensitive' would be too charitable an expression to describe such a development; in fact the choice seems to be between 'inept' and actually 'malicious'.

An initial sketch of the proposal was exhibited here several years ago, and naturally I tried to object to it. I was subsequently told that the plans for the building had been reduced in scale and there was now nothing to worry about. It was only quite recently that it was revealed that the proposed building, whose implementation was then a lot nearer than before, *does* still impinge on the dome, and the annexe to the dome will "have to be" demolished. You will see that the University's plan of the site shows the dome as merely a circular structure, without any annexed room at all.

When I managed to obtain a new instrument about 20 years ago I also managed to get the extra room, whose retention is now at issue, attached to the dome\*. It is kept modestly warmed, so that the computer that operates the instrument, and several different power supplies, are comfortable there. Indeed I too can repair to it during any prolonged observation, rather than continuing to sit at the eyepiece of the telescope at the outdoor ambient temperature, which of course can often be below freezing in the winter. I now have an automatic guider, so I can leave the telescope to itself for limited periods and can get on with other tasks on the computer. The loss of the room would be very keenly felt in many ways. Not only would there be a problem over where to site the computer, power supplies and server, etc., but there would be nowhere where I could go and work without going much further from the telescope, involving a much longer delay in returning to it when something goes wrong or needs attention. Even if I were allocated an office in the new building (which does not seem probable), if it is anything like other new buildings on the site one's mere entrance into the building puts on a set of blinding lights that totally destroy the dark adaptation that a real astronomer needs to retain.

It is absolutely unnecessary that the building should be put where it is currently planned. If it were made part of the rectangle that the ordinary person, looking at the existing buildings, would expect it to form, there would not be the same difficulty. If it were simply moved (obtuse angle and all) a few feet to the north, closing up the unnecessary gap between it and the recently built 'Kavli' building, it would no longer impinge on the dome – though of course I still would not welcome it in such close proximity. I do not know whether the actual footprint of the building overlaps that of my computer room: people have told me that there needs to be a space such as is shown on the plan and such that a fire engine could drive between the two. If that is so, I wonder why the same consideration seems not to have applied to the Kavli building: although there is a gap (with bridge) between it and the Wolfson ('Hoyle') building, there is a flight of steps where a fire engine might otherwise drive! In any case, a route *round* the dome would add only about two seconds to a fire engine's journey.

I do hope that you will feel moved by this appeal to intercede on the side of reason (*my* side!) in this matter. I would of course be very pleased and grateful if you would do so, and it goes without saying that I would be glad to come to your office, or to show you the situation on-site here, if you think that that would be helpful.

With best wishes,

Yours sincerely,

\*See the picture, from the Department's web site. All of the trees shown, which used to shield the dome from the street lights and traffic on Madingley Road, have recently been felled, apparently just so that a footpath can be constructed.