

## The IAU Working Group on Wide-field Imaging

Whenever you open a semi-popular astronomical journal you will be reminded of the fact that Wide-Field Imaging has other uses than those which are strictly scientific. Few basic sciences are as 'visible' as is astronomy. Spectacular pictures of the sky convey to the public an image of our science as a fascinating and desirable human activity, hereby supporting the astronomical community all over the world in an indirect, but very efficient way.

Many of these images have been made by specialised wide-field telescopes, in particular by the large Schmidts. Others, and here I think in particular about the beautiful work by Dave Malin, come from the prime foci of 4-metre class telescopes. These telescopes, for instance at Kitt Peak, Mauna Kea, Siding Spring, Calar Alto, Roche de los Muchachos and La Silla are all equipped with complex optical systems, e.g. triplet correctors, which give well-corrected, flat fields of the order of 1 degree diameter.

However, at some of these telescopes, comparatively small CCDs have recently taken over and the photographic option is no longer offered to visiting astronomers. This may not constitute a disaster if it was only used for making pretty pictures, but this is not so. Lamentations are now heard in other quarters, above all among some astrometrists.

Until much more powerful meridian circles are built than those which are now in existence (and this may never happen), the only possible way to *measure the positions of very faint objects directly into the standard reference frames*, e.g. FK5, is to obtain deep, high-angular resolution, wide-field photographic exposures which show the faint objects and the sparse, brighter astrometric standards at the same time. The existing astrographs have too small apertures and do not go deep enough. Schmidt plates may reach all but the faintest magnitudes, but the relatively short focal lengths of the world's large Schmidt telescopes limit the precision which can be obtained. Let us hope, therefore, that at least some of these 4-m class telescopes will maintain the photographic option, in any case until the CCD mosaics have become large and stable enough to be used for such fundamental research programmes.

The question of photography versus digital detectors was one of the subjects discussed by the WG Organising Committee (OC) when it met last April in Baltimore. We were fortunate to be joined by Richard Kron (Chicago) who is actively engaged in the preparations for the use of large CCD mosaics for surveying. In the meantime, Richard has been co-opted as a member of the OC and there is no doubt that he will greatly strengthen our interaction with the digital detector specialists.

An important decision at the OC meeting was to hold a major meeting in 1993, with the title: '*Astronomy from Wide-Field Imaging*'. It will take place in Potsdam, Germany (near Berlin) from August 23 – 27, 1993. A detailed description of the plans for this meeting will be found in this issue. All WG members are cordially invited and so are all others with an interest in this type of research.

The large number of excellent articles in this issue of the Newsletter is a visible sign of the great interest in wide-field techniques and the science that results. (It also says something about the efficiency of the Editor — thanks, Harvey!) I am convinced that the meeting next year will confirm this trend and will be a great opportunity for researchers from all continents to get to know each other and to exchange ideas, technical as well as scientific. Do plan to come to Potsdam!

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