



• La Silla  
• La Serena  
• Santiago

• Munich  
• Geneva

## ESO Workshop on Populations in the Magellanic Clouds

The second ESO workshop took place in Geneva, at the ESO Scientific-Technical Centre from April 27 to 29, 1977. Over fifteen groups working in this field in Europe were represented at this workshop. About thirty-five invited scientists from all ESO countries, as well as England, South Africa and Canada, discussed and compared their recent activities, results and future plans.

A series of review talks took place on the first day; they dealt with the stellar populations of the Clouds (photometric and spectroscopic analysis), the variable stars, the radio properties of the Clouds and the Magellanic Clouds as members of the Local Group.

The various groups then presented their activities on the second day. Details were given of the work on the chemical composition of the interstellar matter and supergiant stars which have allowed an analysis of the heavy-element underabundance in terms of the proportion of matter in the form of interstellar gas. An estimate of the supernova rate was given together with some new supernova remnant candidates. Preliminary results on UV observations allowed a rough determination of the reddening law in the Clouds. The structure of the Clouds appeared still to be controversial, in particular for the Large Cloud. More work should be devoted to determine the mass centre of different stellar populations and to compare the rotation curves for the stars and the gas. Photometric and spectroscopic results for different stellar populations were also presented, and the difficulty of finding clear criteria for spectral classifications was emphasized.

A subsequent general discussion showed the importance of the Clouds for our understanding of galactic evolution. It dealt with the rate of star formation in the Clouds and their evolution compared to that of our Galaxy. Further UV observations are necessary to solve the problem of the nature of the grains in the Clouds. IR observations were proposed to determine an evolutionary sequence of nova shells, and to check the assumption of the formation of grains in these shells. Simultaneous optical and X-ray observations, once HEAO B is flying, will be very valuable for the study of supernova remnants and X-ray stellar sources.

J. Bergeron, ESO-Geneva

### ANNOUNCEMENT

A conference is being planned at the European Southern Observatory on the topic:

#### Optical Telescopes of the Future

It is expected that this conference will take place in Geneva, 12–16 December, 1977. Topics will include: large dishes, coherent and incoherent arrays, intensity and speckle interferometry, multi-mirror telescopes, space telescopes, IR heterodyne interferometry, live optics and related aspects of detectors and radio arrays.

Information on this conference should become available during this summer.

PROFILE OF A VISITOR'S PROGRAMME:

## A Galactic Window at $l = 311^\circ$

*There are reasons to believe that several nearby galaxies (possibly even members of the Local Group) still hide behind the absorbing layers of the galactic plane. Last month, a new, local dwarf elliptical galaxy was discovered in the constellation Carina by a group of astronomers at the Edinburgh Observatory and a thorough investigation of another, the so-*