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ESO Workshop on Optical Studies of X-ray Sources

The first of what is to be a series of workshops on different topics has just taken place in Geneva at the ESO Scientific-Technical Centre. The purpose of these workshops is to gather together a number of European astronomers working in a well-defined field of research or of instrumental development to review the present status of knowledge, to compare methods and results, and in particular to coordinate future plans. In order to achieve these aims, it is of obvious importance that all European groups active in the chosen subject be represented. Also, the workshops should be as informal as possible and have a relatively small number of participants.

The first workshop took place from April 28-30, 1976 and dealt with optical observations of compact X-ray sources. There are at least a dozen groups working in this field in Europe and they use a variety of techniques:

Globular cluster NGC 1851 (R.A. = 5512m; Decl. =: -40°) from which X-ray bursts have been reported on February 20, 1976 (IAU Circular 2913). Reproduced from ESO Quick Blue Survey plate 1240 (field 305). 60 min. exposure, IIa-O + GG 385, ESO 1 m Schmidt telescope.

spectroscopy, photometry, ultra-rapid photometry, etc.... Theoretical interest is also very high. The workshop was therefore attended by about thirty especially invited scientists from all ESO countries as well as from England, Italy and the USA.

After an initial series of review talks on the properties of compact X-ray sources in different spectral ranges, the various groups presented their activity. The attendance of some specialists in X-ray astronomy was particularly useful. They not only described their data but also presented the opportunities which now exist (or are likely to arise in the near future) for coordinated observations. It is obvious, especially when dealing with variable sources, that the value of both optical and X-ray data greatly increases when simultaneous observations exist in the other spectral range. Indeed, the topic discussed was a typical example of the need which often arises in modern astronomy to gather and coordinate information resulting from quite different channels such as optical, radio and X-ray astronomy. A specific discussion dealt with future plans for optical observations of various Individual X-ray sources both in the northern and in the southern sky.

The association of compact X-ray sources with close binary systems and globular clusters has undoubtedly added a new motive for interest in the classic and already fundamental investigation of these objects.