

Preface

A variety of observations obtained during recent years suggest that acceleration of particles to very high energies and the production of relativistic beamed flows occur, and may actually be rather common, in X-ray binaries and their evolutionary descendants. These observations include the non-thermal radio emission of low-mass X-ray binaries and its relation to their X-ray properties, the presence of jets and extended double radio emission around X-ray binaries, and the reported detections of these systems at very-high photon energies. It is not clear whether there is a direct relation between these different observations.

Under the auspices of the Royal Netherlands Academy of Sciences a meeting was held in Amsterdam from June 18 to 22, 1990, in which 45 active researchers, theorists as well as observers, and graduate students participated, to discuss these results. In these proceedings we have collected the written versions of the invited reviews which were received by us by mid-February 1991.

The meeting was made possible by the support of the Royal Netherlands Academy of Sciences. We like to thank here Mrs. C.E. Zwager and Mrs. Y. Smits of the Academy, for their help in organizing this meeting, which contributed in no small way to its success.

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