

PREFACE

When in 1974 Professor Strohmeier asked me if I would be willing to act as scientific chairman for a new Variable Star Colloquium in Bamberg, the last before his retirement as director of the Bamberg Observatory, I immediately agreed. A scientific organizing committee consisting of Drs. I. Appenzeller, H.J. Habing, R.M. Hjellming, R.P. Kraft, P. Pacynski, and M. Plavec was soon established. After reviewing the topics of recent colloquia and of those in the stage of planning, we decided to look a bit more into the details of the interaction of variable stars with surrounding material. Indeed, if one goes through all the classes of variable stars, there are many which interact with their environment by either receiving mass from it, or by shedding mass into it. Immediately many questions come up: Can observations of T Tauri stars be brought into agreement with current models of protostars, with circumstellar clouds? - Are the UV Ceti stars which normally appear together with T Tauri stars in stellar associations and clusters completely different from them, or has whatever makes them variable nothing to do with star formation? - Is it too simple to say that, if in a close binary system there is slow mass exchange, the kind of variable star phenomenon which appears depends on the receiving star: If the receiving star is a normal main sequence star, one just gets an Algol type variable; if the receiving star is a white dwarf, the nova phenomenon occurs; and if the matter is falling onto a neutron star, one has an X-ray source. - What is the real difference between novae and dwarf novae, although they have so many common characteristics? - Are their outbursts really due to completely different mechanisms? - Is the maser action around Mira stars connected with the fact that the central star is pulsating, or is there no interaction between the pulsation and the extended cloud around the star?

These were just some of the questions which could be asked. It was therefore not difficult to work out a preliminary program, and it was fairly easy to get good invited speakers. After the preliminary program was distributed, we also received many announcements for short contributions.

We now present the proceedings of the conference to the astronomical community. The editors could not resist including at the end

of this volume some photographs of the social events during the conference, when the participants were guests of the Mayor of Bamberg.

The following institutions supported the meeting and publication: Bayerisches Staatsministerium für Unterricht und Kultus (Munich), Deutsche Forschungsgemeinschaft (Bonn-Bad Godesberg), International Astronomical Union (Geneva), Max-Planck Gesellschaft (Munich), Stadt Bamberg, Universität Erlangen-Nürnberg, Gesamthochschule Bamberg, Überlandwerk Oberfranken (Bamberg).

Prof. J. Rahe did most of the editing; proofs were read by Dr. P. Bedijn, Prof. J. Rahe, Dr. H.-C. Thomas, Dr. H. Yorke, and myself. I want to thank Professor Strohmeier for his help, and all those who have assisted in making this volume ready on time by their contributions, and by typing, editing, reading, and drawing.

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