

PREFACE

The XXth meeting of the IAU in Australia in 1973 made the venue for the IAU Symposium No. 59 on Stellar Instability and Evolution, at Mount Stromlo Observatory on August 16–18, a very appropriate one. Many of the current and former staff of Mount Stromlo Observatory (operated by the Australian National University) have specialized in the study of variable stars and it was with considerable pleasure that Mount Stromlo Observatory accepted the responsibility of hosting and making the local arrangements for IAU Symposium No. 59.

The Scientific Organizing Committee was particularly active in formulating the program and comprised Drs N. Baker, P. Demarque, M. Feast, G. Herbig, I. Iben, P. Ledoux, J. Ostriker and E. Schatzman. The aim of the Committee was to integrate the review and contributed papers on the particular instability mechanisms involved, their observational manifestations and their relation to the internal structure of the star as inferred from its evolutionary history.

The Local Organizing Committee consisted of Miss P. Petrie and A. W. Rodgers. Miss Petrie made all of the local arrangements and she was ably helped during the running of the Symposium by Mesdames P. Lea, V. Bloxham and J. Hinchey and Messrs. C. Smith, H. Butcher, J. Mould, R. Gingold and G. da Costa. The Symposium, officially opened by the Acting Vice Chancellor of the Australian National University, Professor N. Dunbar, was held in the lecture theatre of the Observatory some ten miles from Canberra, and theorists were confronted with the cold realities of observing (and Australian meat pies) by having lunch served to them in the spacious dome of the 26-inch refractor on Mount Stromlo.

According to the IAU publishing rules, the invited papers are printed in full extent, while only abstracts of the contributed papers are given.

As far as the discussions are concerned, the best had to be made of the transcription of a tape recording and of whatever written comments reached the editors. The latter present their apologies for the imperfections and omissions, but they hope that, in the present form, the printed discussions reflect the liveliness and the interest of the debates.