

PREFACE

The Symposium on the Crab Nebula was held in the University of Manchester from 5 to 7 August, 1970. The meetings on the first day were held in the Physics Department on the University campus, and on the second and third days at the Nuffield Radio Astronomy Laboratories, Jodrell Bank. The 4th Symposium of the International Astronomical Union, convened in the University and at Jodrell Bank fifteen years earlier (25–27 August, 1955), dealt with the entire subject of radio and radar astronomy. Now the subject matter of this 46th Symposium of the International Astronomical Union was confined to one single object.

It is interesting to recall that even at the 1955 symposium the Crab Nebula figured prominently. In particular, J. H. Oort described the new measurements of the polarization of the light from the nebula and I. S. Shklovsky explained the light and radio emission in terms of the motion of relativistic electrons in the magnetic field of the nebula. No one could have foreseen the exciting discoveries of a decade later which stimulated the assembly of 172 participants to this 1970 Symposium. In addition to the lectures and discussions the visitors were able to tour the laboratories and telescopes at Jodrell Bank to see the various researches in progress. The demonstrations included a real-time display on a cathode ray tube of the pulses from pulsar CP 0328 received in the 250 ft steerable telescope.

With all my colleagues at Jodrell Bank I would like to record our deep indebtedness to the International Astronomical Union for the sponsorship of this Symposium, to the main Organizing Committee of Professors A. G. W. Cameron, F. D. Drake, V. L. Ginzburg, T. Gold, J. H. Oort, F. G. Smith, Dr. J. P. Wild and Professor L. Woltjer, and to the Local Organizing Committee of Drs. J. E. Baldwin, R. D. Davies, J. V. Jelley and Professors F. D. Kahn and F. G. Smith.

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