

PREFACE

During the biannual Plenary COSPAR meeting in The Hague, The Netherlands an astronomically oriented symposium was held on June 25-27, 1990, called "The Infrared and Submillimeter Universe at High Redshifts".

The scientific organizing committee consisted of Beichman, Genzel, Habing, Longair, Matsumoto, Mattila, Puget, Sunyaev, Werner, Wesselius (chairman). The original idea was to organize a conference in the vein of the three IRAS conferences (in 1985 in Noordwijk, The Netherlands; in 1986 in Pasadena, U.S.A.; in 1987 in London, U.K.), emphasizing the infrared observing technique and discussing virtually all astronomical topics. After half a year of discussions the committee decided to concentrate on the prospects of infrared and submm observations for cosmology, also in the expectation that COBE results could be presented after about one year of operations.

Fortunately the COBE launch and subsequent operation was completely successful, and the Editors feel that the highlight of these proceedings are the two reports on COBE results by Mather *et al.* and Smoot *et al.*

The symposium program consisted of: Introductory Talk, Background Radiation (including COBE results), Distant Galaxies, The Universe at $z < 1$, Future Space Missions, Ground-based Prospects, Conference Summary.

It is interesting to note that satellites like ISO and SIRTIF will add relatively little to cosmology in spite of the two papers in this conference. The main cosmological infrared and submm studies are conducted now by COBE and will be done — in the near future — from the ground. Especially large arrays in the near infrared may produce significant results.

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P.R. Wesselius, P.D. Barthel, G. Smoot