

PREFACE

IAU Symposium No. 121 was hosted by the Byurakan Astrophysical Observatory in Soviet Armenia, almost 30 years after Ambartsumian's pioneering ideas about galaxy activity were first published and almost exactly 20 years after the first Byurakan IAU symposium on nuclear activity (No. 29, "Non-stable Phenomena in Galaxies, May 1966). Although the proceedings of the first Byurakan symposium were not published in English, that conference provided a definitive impulse to the field, as Ambartsumian's ideas had done 10 years earlier.

The Byurakan Astrophysical Observatory was thus a particularly appropriate setting for IAU 121. The symposium was also very timely since many new exciting results were presented which will surely revolutionize many of our present ideas about nuclear activity in galaxies and QSO's.

The first results of the by now famous Markarian survey were presented by B.E. Markarian in the first Byurakan conference. Unfortunately, his untimely death prevented him from attending the second conference, but the influence of his fundamental work was certainly felt.

The beautiful site of the Byurakan Observatory, in the foothills of Mount Aragats, provided an ideal setting for this conference. The relaxing atmosphere of Byurakan stimulated much interaction among the participants. Particularly fruitful was the interaction between eastern and western astronomers, and many collaborations and ideas for future meetings will surely arise from their conversations. It was very unfortunate that the director of the Byurakan Astrophysical Observatory, and chairman of the Local Organizing Committee, Academician V.A. Ambartsumian, had to stay in hospital during the whole conference.

The Local Organizing Committee did a wonderful job by ensuring the smooth running of the meeting which was attended by 117 astronomers from 17 different countries. The friendliness of all the staff of the Byurakan Observatory greatly contributed to the success of the conference and was much appreciated by all participants. They and their guests were invited to a number of memorable cultural and social events.

This volume contains all the papers which were presented at the conference. The order in which they are presented here differs slightly from the order in which they were given at the conference, as the editors felt it appropriate to rearrange some contributions in order to preserve the coherence of topics. The Local Organizing Committee made an effort to record all discussions on special forms which were distributed and collected during the symposium. Most of

these discussions have been reproduced in this book.

The editing of the proceedings was supported by the secretarial staff of the Byurakan Astrophysical Observatory, the Universitäts-Sternwarte Göttingen and the European Southern Observatory, Garching. The editors would like in particular to acknowledge the work of Miss Pamela Bristow at ESO and Miss Catrin Kirst at Universitäts-Sternwarte Göttingen, who retyped many contributions, typed the discussion sections, and prepared the manuscript for publication.

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