

CONTENTS

A Reflecting X-Ray Telescope for an Orbital Astrophysical Station I. L. Beigman, L. A. Vainshtein, Yu. P. Voinov, D. A. Goganov, N. I. Komyak, S. L. Mandel'shtam, I. P. Tindo, N. A. Shatskii, and A. I. Shurygin	1
Mirror Systems for X-Ray Telescopes I. L. Beigman, L. A. Vainshtein, Yu. P. Voinov, and V. P. Shevel'ko	13
Extra-Atmospheric Studies in the Submillimeter Range Using On-Board Telescopes A. E. Salomonovich and A. S. Khaikin	35
Optical Systems of On-Board Submillimeter Telescopes A. S. Khaikin	59
A Two-Channel Cooled Receiver for On-Board Telescopes of the Submillimeter Range A. A. Kobzev, V. I. Lapshin, S. V. Solomonov, and A. S. Khaikin	85
A Cryogenic System Containing Liquid Helium for On-Board Radiation Receivers A. B. Fradkov and V. F. Troitskii	91
Band-Pass Filters for the Submillimeter Range S. V. Solomonov, O. M. Stroganova, and A. S. Khaikin	101
Properties of the Construction of an On-Board Submillimeter Telescope V. N. Bakun, P. D. Kalachev, A. E. Salomonovich, and A. S. Khaikin	111
An On-Board Submillimeter Spectroradiometer A. A. Kobzev, V. I. Lapshin, V. F. Troitskii, and A. S. Khaikin	117
Polarizing Devices for the Submillimeter Range V. I. Lapshin	125
Adjusted Deformations of Mirror Systems of Fully Steerable Radio Telescopes P. D. Kalachev, A. N. Kozlov, V. B. Tarasov, and V. N. Titov	137
Limiting Dimensions of a Fully Steerable Parabolic Mirror for a Radio Telescope P. D. Kalachev	147
Experimental Study of Structural Systems of Aerodynamic Compensators in Application to Parabolic Antennas V. E. D'yachkov, S. L. Myslivets, and V. P. Nazarov	157

A Parabolic Radio Telescope Antenna with a Radially Balanced Main Mirror P. D. Kalachev, V. P. Nazarov, I. A. Emel'yanov, V. L. Shubeko, and V. B. Khavaev	167
Study of Elastic Properties of a Fully Steerable Parabolic Antenna for a Radio Telescope P. D. Kalachev and V. E. D'yachkov	173
An Automatic Data Processing System for Radio Astronomical Observations M. V. Konyukov and V. Yu. Bunakov	189
The Synchronous-Tracking Drive System for the RTI-7.5/250 Radio Telescope of the Moscow Technical College A. A. Parshchikov and I. A. Emel'yanov	199
The RTI-7.5/250 Reflecting Radio Telescope with a Fully Steerable Parabolic Antenna P. D. Kalachev, V. P. Nazarov, A. A. Parshchikov, and B. A. Rozanov	205

