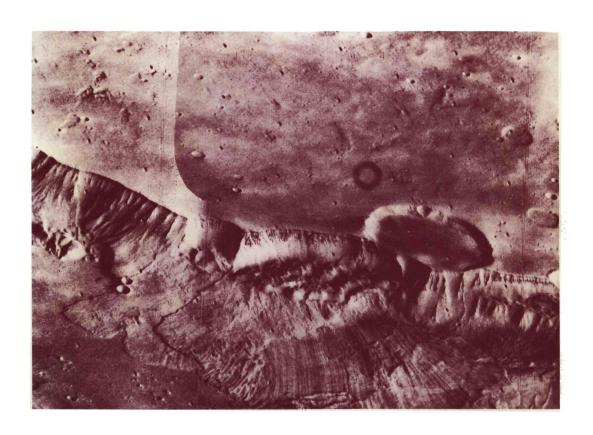
HIGHLIGHTS OF ASTRONOMY

VOLUME 4 (Part II)

As presented at the XVIth General Assembly of the I.A.U. 1976

Edited by EDITH A. MÜLLER





INTERNATIONAL ASTRONOMICAL UNION
D. REIDEL PUBLISHING COMPANY
DORDRECHT-HOLLAND / BOSTON-U.S.A.

HIGHLIGHTS OF ASTRONOMY

VOLUME 4 - Parts I and II

As presented at the XVIth General Assembly of the I.A.U. 1976

In the present volumes are collected some of the scientific highlights of the XVIth General Assembly of the International Astronomical Union. They contain the full texts of the Invited Discourses given by Professor J.-C. Pecker and Dr. C. Sagan, and an abstract of the one given by Dr. P. Morrison. The proceedings of all seven Joint Discussions are included in these volumes. They cover a variety of fields. Apart from the Joint Discussions the reports of two Joint Meetings are published.

Audience:

All those involved and interested in astronomical and astrophysical research.

D. REIDEL PUBLISHING COMPANY DORDRECHT-HOLLAND / BOSTON-U.S.A.

HIGHLIGHTS OF ASTRONOMY

INTERNATIONAL ASTRONOMICAL UNION UNION ASTRONOMIQUE INTERNATIONALE

HIGHLIGHTS OF ASTRONOMY

VOLUME 4
PART II

AS PRESENTED AT THE XVIth GENERAL ASSEMBLY
1976

EDITED BY
EDITH A. MÜLLER

(General Secretary of the Union)



D. REIDEL PUBLISHING COMPANY

DORDRECHT-HOLLAND/BOSTON-U.S.A.

1977

Library of Congress Cataloging in Publication Data

Highlights of Astronomy as presented at the General Assembly of the IAU.

International Astronomical Union.

Highlights of Astronomy as presented at the XVIth General Assembly of the IAU v. 4 (2 parts) 1977

Dordrecht, D. Reidel

illus.

Editor: 1967, L. Perek; 1970, C. de Jager; 1973, G. Contopoulos; 1977, E. Müller.

1. Astronomy-Congresses. I. Perek, Lubos, ed.

II. Jager, Cornelis de, ed. III. Title.

QB51.I 57 520

71-159657

ISBN 90-277-0849-5 (part I); 90-277-0830-4 (pbk.) 90-277-0850-9 (part II); 90-277-0832-0 (pbk.)

Published on behalf of the International Astronomical Union by

D. Reidel Publishing Company, P.O. Box 17, Dordrecht, Holland

All Rights Reserved
Copyright © 1977 by the International Astronomical Union

Sold and distributed in the U.S.A., Canada, and Mexico by D. Reidel Publishing Company, Inc. Lincoln Building, 160 Old Derby Street, Hingham, Mass: 02043, U.S.A.

No part of the material protected by this copyright notice may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any informational storage and retrieval system, without written permission from the publisher

Printed in The Netherlands

TABLE OF CONTENTS

PRI	EFACE	VII
	JOINT DISCUSSIONS	
1.	Galactic Structure in the Direction of the Polar Caps (edited by M.F. McCarthy and A.G.D. Philip)	3
	CONTENTS	5
5.	Stellar Atmospheres as Indicator and Factor of Stellar Evolution (edited by R. Cayrel)	99
	CONTENTS	101
6.	The Small Scale Structure of Solar Magnetic Fields (edited by F.L. Deubner)	219
	CONTENTS	221
7.	The Impact of Ultraviolet Observations on Spectral Classification (edited by L. Houziaux)	277
	CONTENTS	279
	JOINT MEETINGS	
OOTMI PERIINGS		
Ob	servational Evidence of the Heterogeneities of the Stellar Surface (edited by M. Hack and J.P. Swings)	s 373
	CONTENTS	375

VI TABLE OF CONTENTS

CONTENTS OF VOL. 4 - PART I

INVITED DISCOURSES

- J.-C. PECKER / L'Astronomie Infrarouge et les Poussières Galactiques
- P. MORRISON / Astronomy and the Laws of Physics
- C. SAGAN / Exploration of the Planets

JOINT DISCUSSIONS

- X-Ray Binaries and Compact Objects (edited by E.P.J. van den Heuvel)
- Space Missions to the Moon and Planets (edited by S.K. Runcorn)
- 4. Clusters of Galaxies, Cosmology and Intergalactic Matter (edited by M.S. Longair and J.M. Riley)

JOINT MEETINGS

Prospects in Space Astrometry (edited by P. Lacroute)