

# MULTIPLE PERIODIC VARIABLE STARS

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VOLUME 60  
PROCEEDINGS

# MULTIPLE PERIODIC VARIABLE STARS

PROCEEDINGS OF THE  
INTERNATIONAL ASTRONOMICAL UNION COLLOQUIUM No. 29,  
HELD AT BUDAPEST, HUNGARY 1-5 SEPTEMBER 1975

*Edited by*

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INVITED PAPERS



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

ISBN-13: 978-94-010-1177-8 e-ISBN-13: 978-94-010-1175-4  
DOI: 10.1007/978-94-010-1175-4

Joint edition published by  
D. Reidel Publishing Company,  
P.O. Box 17, Dordrecht, Holland and  
Akadémiai Kiadó, Budapest, Hungary

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.

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Softcover reprint of the hardcover 1st edition 1976

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## PREFACE

The I.A.U. Colloquium No. 29 was held in Budapest, September 1–5, 1975. The subject of the colloquium was: “Multiple Periodic Variable Stars”. The colloquium was organized by the Scientific Organizing Committee consisting of W. S. Fitch (Chairman), M. W. Feast, B. V. Kukarkin, P. Ledoux, J. Smak, R. S. Stobie, B. Szeidl, B. Warner and S. C. Wolff.

The local organization was placed in the hands of a Committee consisting of the staff of the Konkoly Observatory: B. Szeidl (Chairman), K. Barlai, M. Ill, S. Kanyó and L. Szabados.

The colloquium was attended by about 90 scientists representing Australia, Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Denmark, France, F.R.G., G.D.R., Greece, Hungary, India, Ireland, Italy, Japan, The Netherlands, New Zealand, Poland, Roumania, South Africa, United Kingdom, U.S.A. and U.S.S.R.

Eight sessions were held, viz.

1.  $\beta$  Canis Majoris Stars. Chairman: W. Wenzel
2. Magnetic and Ap Variables. Chairman: S. C. Wolff
3. Miras and Red Variables. Chairman: P. R. Wood
4. Cepheids. Chairman: R. S. Stobie
5. RR Lyrae Stars. Chairman: B. Szeidl
6. RRs and  $\delta$  Scuti Stars. Chairman: W. S. Fitch
7. White Dwarfs and Novae. Chairman: B. Warner
8. Close Binaries and X-Ray Sources. Chairman: E. H. Geyer

At the beginning of the first session a welcome was presented by Professor G. Marx on behalf of the Hungarian Academy of Sciences and the Eötvös Loránd Physical Society. Then B. Szeidl delivered a memorial lecture of László Detre who had initiated this colloquium.

In general, the sessions started with two reviews, one for theory and one for observation.

**B. SZEIDL**

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IN MEMORY OF LÁSZLÓ DETRE (1906-1974)

B. Szeidl

Now we are just going to discuss the problems of multiple periodic variable stars. It is, however, very sad to know that the one who took the initiative in organizing this colloquium is no longer here among us. Professor Detre died last autumn when he was only at the age of 68.

Until the end of his life he was interested almost in every field of astronomy. Every day he devoted 5-6 hours to reading the periodicals and journals. I remember how enthusiastic he was when he had read about a new astronomical discovery. He was very well trained in mathematics and so it is not surprising that he was especially impressed by celestial mechanics. Poincaré's books were his favorite readings. But the variable stars had always been nearest to his heart. He had been engaged with variable star research during 40 years of his life.

Detre's career was not too eventful. In his youth he was already interested in sciences, especially in physics, mathematics and astronomy. Having finished his studies at the Friedrich Wilhelm Universität in Berlin he was appointed an assistant of the Budapest Observatory in 1929 and had been its director from 1943 until 1974.

During the years spent in Germany Dr. Detre made many friends. Even after many years he was still eager to return to Germany from time to time, and meet his old friends and see the places where he had lived. He liked to recall memories of the past, particularly the college-years and was fond of telling droll stories about the college-life in Berlin, famous professors and university-fellows who later on became well-known scientists.

Dr. Detre liked to talk much about his family-tree. Among his ancestors there were Germans as well as Armenians. But he in his heart was a real Hungarian. In the thirties when many Hungar-

ian scientists left the country seeking better research possibilities and a more comfortable life, he remained here urged by a determination of raising the standard of astronomical research here in Hungary. He began working under very bad conditions. Having only a 6 in. photographic camera, already in 1933 he started the program which has been the main research field of the Konkoly Observatory during the past 40 years, i.e., the investigation of the light curve variations and period changes of a number of RR Lyrae stars. It was hoped that by scrutinizing both these problems a better insight could be obtained into the unknown mechanism of these stars. During the coming days we shall be able to see how these hopes have been fulfilled.

Dr. Detre was aware of the importance of the observations. If the sky was clear the telescopes at our observatory had to be in action both on weekdays and holidays. You can look up the records made at Christmas Eves or New Year's Eves and you will be convinced that not a single hour of clear nights was ever wasted. He used to work at night and it was always very pleasant to be in his company. He liked joking and talking. But if the sky was getting clear he suddenly changed. At such a time he was more like a slave-driver. Perhaps observing was the only matter he took very seriously.

In the 1950-s the observing conditions were getting worse and worse near Budapest. Under Professor Detre's directorship and direct guidance a new observing station was built in the Mátra mountains, on one of the highest points of Hungary. Now this new observatory is fairly well equipped. We have there a 20 in. Cassegrain-, a 24 in./36 in. Schmidt- and a 40 in. Ritchey-Chrétien telescope, all made by Zeiss-Jena.

Almost half a century ago, when Dr. Detre commenced work he had to overcome many difficulties. During these it was he who turned our unknown observatory into a well-equipped and better known institute. A year ago or so Professor Detre passed on to us the torch to carry. We hope that under the better conditions created by him we will be able to continue his work and be faithful to his heritage.