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THE MOTION, EVOLUTION OF ORBITS, AND ORIGIN OF COMETS

Edited by G. A. CHEBOTAREV, E. I. KAZIMIRCHAK-POLONSKAYA,
and B. G. MARSDEN



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The Motion Evolution Of Orbits And Origin Of Comets

**Laurel L. Wilkening, Mildred Shapley
Matthews**



The Motion Evolution Of Orbits And Origin Of Comets:

The Motion, Evolution of Orbits, and Origin of Comets G.A. Chebotarev, E.I. Kazimirchak-Polonskaya, B.G. Marsden, 1972-09-30 The many papers by Soviet authors have been translated into English by A P Kirillov N A Nikiforova E A Voronov and others Some of the papers were translated by the authors themselves The discussion records have been prepared at the Institute for Theoretical Astronomy by V K Abalakin N A Belyaev A P Kirillov V A Shor E A Voronov N S Yakhontova and others The three papers published in French have been carefully checked by B Milet The final editing has been done at the Smithsonian Astrophysical Observatory and we thank J H Clark P D Gregory J E Kervick and G Warren for retyping much of the material Our special thanks are due to the D Reidel Publishing Company for the excellent care they have taken in printing these proceedings of IAU Symposium No 45 G A CHEBOTAREV E I KAZIMIRCHAK POLONSKAYA B G MARSDEN INTRODUCTION The idea to organize a Symposium on The Motion Evolution of Orbits and Origin of Comets dates back to the IAU thirteenth General Assembly held in 1967 in Prague Owing to the impossibility of completing during the General Assembly the discussion on the problem of orbital evolution of comets Professor G A Chebotarev then the newly elected President of IAU Commission 20 initiated the organization of the international symposium in Leningrad where the full scope of cometary problems might be considered from the viewpoint of celestial mechanics

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where they originate and how their evolution develops The second volume goes into the details of what a comet is the nucleus the coma cometary dust plasmas and magnetic fields The book ends with a reflection by Fred Whipple about Comets in the Post Halley Era The book discusses all aspects of comets and is therefore suitable for use in graduate level courses All astronomers and geophysicists interested in comets will find very useful and well presented information in this book

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