## Contents

Introduction

Karl-Ludwig Klein
Part I Energy Release and Magnetic Reconnection
Magnetic Reconnection on the Sun and in the Earth's Magnetosphere  Manfred Scholer
Magnetic 3-D Configurations of Energy Release in Solar Flares  Bojan Vršnak
Theoretical Models of Magnetic Configurations Relevant to Energy Release Yihua Yan
The Energy Release Process in Solar Flares; Constraints from TRACE Observations Lyndsay Fletcher, Harry P. Warren
Radio Diagnostics of Flare Energy Release Arnold O. Benz
Signature of Energy Release and Particle Acceleration Observed by the Nobeyama Radioheliograph Kiyoto Shibasaki
How Well Do We Understand Magnetic Reconnection?  Dieter Biskamp
Part II Energetic Particles at and from the Sun
What Can Be Learned About Competing Acceleration Models from Multiwavelength Observations?  Nicole Vilmer, Alexander L. MacKinnon

## VIII Contents

Transport of Energy from the Corona to the Chromosphere During Flares
Petr Heinzel, Marian Karlický161
On the Origin of Solar Energetic Particle Events Säm Krucker
Acceleration and Propagation of Solar Energetic Particles  Wolfgang Dröge
Particle Acceleration by Magnetic Reconnection  Yuri E. Litvinenko
Particle Acceleration Processes in Cosmic Plasmas Reinhard Schlickeiser
Part III Aspects of Current Research
Recent Progress in Understanding Energy Conversion and Particle Acceleration in the Solar Corona  Bernhard Kliem, Alec MacKinnon, Gérard Trottet, Tim Bastian
Solar Observations at Submillimeter Wavelengths  Pierre Kaufmann
Index