

Polarimetry of Stars and Planetary Systems

Edited by Ludmilla Kolokolova

University of Maryland, College Park

James Hough

University of Hertfordshire

and Anny-Chantal Levasseur-Regourd

Université de Paris VI (Pierre et Marie Curie)

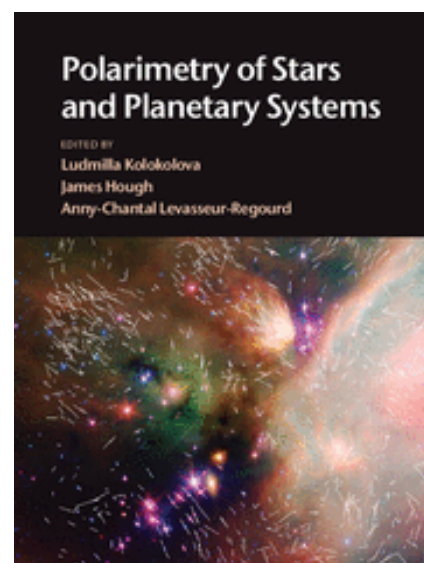
Summarising the striking advances of the last two decades, this reliable introduction to modern astronomical polarimetry provides a comprehensive review of state-of-the-art techniques, models and research methods. Focusing on optical and near-infrared wavelengths, each detailed, up-to-date chapter addresses a different facet of recent innovations, including new instrumentation, techniques and theories; new methods based on laboratory studies, enabling the modelling of polarimetric characteristics for a wide variety of astronomical objects; emerging fields of polarimetric exploration, including proto-planetary and debris discs, icy satellites, transneptunian objects, exoplanets, and the search for extraterrestrial life; and unique results produced by space telescopes, and polarimeters aboard exploratory spacecraft. With contributions from an international team of accomplished researchers, this is an ideal resource for astronomers and researchers working in astrophysics, earth sciences, and remote sensing keen to learn more about this valuable diagnostic tool. The book is dedicated to the memory of renowned polarimetrist Tom Gehrels.

Contents

Part I. Introduction: 1. Preface; 2. The life of Tom Gehrels; Part II. Theory, Instrumentation, Laboratory Studies: 3. Measurement and modelling of electromagnetic scattering by particles and particle groups; 4. Instrumentation; 5. Laboratory studies; 6. Grain alignment: role of radiative torques and paramagnetic relaxation; 7. Multiple scattering of light in particulate planetary media; 8. Experimental scattering matrices of clouds of randomly oriented particles; Part III. Stars and their Environment: 9. Interstellar polarization; 10. Young stellar objects and their environment; 11. T Tauri and Herbig Ae/Be stars; 12. Magnetic fields in high-mass star forming regions; 13. Evolved stars; 14. Stellar magnetic fields; 15. Imaging of protoplanetary and debris disks; Part IV. Solar System: 16. The Sun; 17. Terrestrial planets; 18. The Moon; 19. Gas giant planets, Saturn's rings, and Titan; 20. Icy moons of the outer planets; 21. Asteroids; 22. Comets; 23. Transneptunian objects and Centaurs; 24. Interplanetary dust; Part V. Exoplanets and Exobiology: 25. Exoplanets; 26. Astrobiology; Appendix A. Polarimetric definitions for astronomy.

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