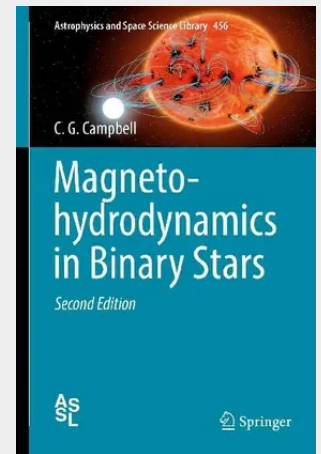


Magnetohydrodynamics in Binary Stars

Magnetism in binary stars is an area of central importance in stellar astrophysics. The second edition of "Magnetohydrodynamics in Binary Stars" is a major revision of the first edition. The material has been updated and extended, including additional chapters on the origins of the stellar magnetic fields and accretion disc magnetic winds. A comprehensive account is given of the subject, from the early work up to the latest results. The unifying theme remains the redistribution of angular momentum by magnetic stresses. This occurs in a wide variety of ways, including magnetic stellar and orbital coupling, magnetic channelling of accretion streams, magnetic stellar coupling to accretion discs, dynamo field coupling in discs, and magnetic stellar and disc winds. The associated stellar spin and orbital evolution problems, including stability, are also considered. Although the main focus is on binary stars, much of the work on accretion discs and wind flows has more general astrophysical relevance. Convenient formulae are included that can be compared to observations, making the book useful to observers as well as theorists, and there are extensive reference lists. The material is mainly aimed at research workers, but parts of the text could be useful for postgraduate courses in magnetic stellar astrophysics topics.

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