

Astronomical Masers

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This book provides an extensive coverage of the interstellar maser phenomenon. A precondition for maser action is departure from thermal equilibrium. The book therefore starts with a detailed coverage of the basic background concepts required for an understanding of line formation and radiative transfer. It goes on to describe the theoretical and phenomenological aspects of interstellar masers, their formation sites and the inversion mechanisms.

The book will interest active researchers in astronomy and astrophysics as well as in other areas of physics. It is suitable as a textbook in a graduate course and will enable a graduate student to embark on research projects in this exciting area in particular, and molecular radio astronomy in general.

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