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| Nota di contenuto       | Disk observations -- Keplerian circumstellar disks in Taurus: The GG Tau Ring and the DM Tau Disk -- Circumstellar disks in the Trapezium Cluster -- High resolution observations of disks around protostellar sources with the Nobeyama Millimeter Array -- Spatially resolved spectroscopy of infrared companions to T Tauri stars -- Physical processes in circumstellar disks -- The FU orionis outburst as a thermal accretion event: Theoretical and observational implications -- Interaction of young binaries with protostellar disks -- Numerical simulations of the formation of binary and multiple protostellar disks, starting from dynamic initial conditions -- The quest for evolutionary diagrams of young stellar objects -- Neutral gas in the vicinity of Herbig AeBe stars: What can we learn from red-shifted sodium absorption lines? -- The stellar populations of deeply embedded young clusters: Near-infrared spectral classification -- |

Multiplicity in the Ophiuchus and Taurus star forming regions -- A massive "core" associated with the UC HII region G31.41+0.31 -- Prediction of stellar mass in star formation: Theory and its application to the Orion A cloud -- Star-disk interactions in small N clusters: How to form binary stars -- Proper motion measurements in jets from young stars -- Molecular entrainment by optical jets -- HH 212: The most beautiful protostellar jet known to date -- Dust scattering as a diagnostic tool for neutral winds in bipolar outflows—The case of IRAS 08159-3543 -- A long-slit spectroscopic survey of forbidden emission lines in T Tauri stars -- Aperture synthesis observations of CO outflows in low-mass star forming regions -- Evolution of outflow activity around low mass embedded young stellar objects -- Forbidden line emission and correlations with the infra-red excess in Herbig Ae/Be stars -- Theory of outflows -- Formation and structure of magnetized protostellar jets -- On the magnetic collimation of jets from young stellar objects -- Stellar jets: Spectral diagnostics and fluidodynamic models -- Concluding remarks.

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Sommario/riassunto

The subject of the book, the ubiquitous circumstellar disks around very young stars and the corresponding jets of outflowing matter, has recently become one of the hottest areas in astrophysics. The disks are thought to be precursors to planetary systems, and the outflows are thought to be a necessary phase in the formation of a young star, helping the star to get rid of angular momentum and energy as it makes its way onto the main sequence. The possible connections to planetary systems and stellar astrophysics makes these topics especially broad, appealing to generalists and specialists alike. The CD not only contains papers that could not be printed in the book but allows the authors to include a fair amount of data, often displayed as color images.

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