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Titolo	Jets from Young Stars [[electronic resource]] : Models and Constraints / / edited by Jonathan Ferreira, Catherine Dougados, Emma Whelan
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Note generali	Collection of lectures from the first school, Jets from Young Stars: Models and Constraints, held in Villard de Lans France in January 2006.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Observational Constraints -- The First Three Million Years -- Jets from Young Stars: The Need for MHD Collimation and Acceleration Processes -- Star-disk Interaction in Classical T Tauri Stars -- Magneto-Hydrodynamic Models -- to Magneto-Hydrodynamics -- Theory and Models of Standard Accretion Disks -- Theory of MHD Jets and Outflows -- Transit Flows and Jet Asymptotics -- MHD Disc Winds -- Stellar Wind Models.
Sommario/riassunto	This volume contains the edited lecture notes of the First JETSET School on Jets from Young Stars: Models and Constraints, held by the Marie Curie Research and Training Network on JET Simulations, Experiments and Theory. At this school the lecturers gave an introduction to observational properties and basic models describing the launching and collimation mechanisms of jets. The first half of the book is devoted to general observational constraints, covering the outflow

phenomenon in young stars, the identification of magneto-centrifugal processes as the main jet driving mechanism, and the magnetic interaction between the star and its accretion disc. The second half of the book is devoted to theoretical knowledge of magneto-hydrodynamic processes pertinent to the jet launching mechanism in young stars. This comprises a general introduction to magneto-hydrodynamics, a description of the role of MHD processes in Standard Accretion Discs, and the physics of steady state MHD outflows, from the basic concepts and equations to modern self-similar solutions. Further lectures detail the various classes of steady magnetic-wind models currently discussed in the context of protostellar jets.