1. Record Nr. UNINA9910254607303321 Autore Bisbas Thomas G Titolo The Interstellar Medium, Expanding Nebulae and Triggered Star Formation: Theory and Simulations // by Thomas G. Bisbas Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-26142-8 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (82 p.) Collana SpringerBriefs in Astronomy, , 2191-9100 Disciplina 530 Soggetti **Astrophysics** Mathematical physics Astrophysics and Astroparticles Theoretical, Mathematical and Computational Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto The Interstellar Medium -- Nebulae -- Triggered Star Formation --Numerical Simulations -- Summary. Sommario/riassunto This brief brings together the theoretical aspects of star formation and ionized regions with the most up-to-date simulations and observations. Beginning with the basic theory of star formation, the physics of expanding HII regions is reviewed in detail and a discussion on how a massive star can give birth to tens or hundreds of other stars follows. The theoretical description of star formation is shown in simplified and state-of-the-art numerical simulations, describing in a more clear way how feedback from massive stars can trigger star and planet formation. This is also combined with spectacular images of nebulae taken by talented amateur astronomers. The latter is very likely to stimulate the reader to observe the structure of nebulae from a different point of view, and better understand the associated star

formation therein.