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Sommario/riassunto

Luminous hot stars represent the extreme upper mass end of normal stellar evolution. Before exploding as supernovae, they live out their lives of a few million years with prodigious outputs of radiation and stellar winds, dramatically affecting both their evolution and environments. A detailed introduction to the topic, this book connects the astrophysics of massive stars with the extremes of galaxy evolution represented by starburst phenomena. A thorough discussion of the physical and wind parameters of massive stars is presented. HII galaxies, their connection to starburst galaxies, and the contribution of starburst phenomena to galaxy evolution through superwinds, are explored. The book concludes with the wider cosmological implications, including Population III stars, Lyman break galaxies and gamma-ray bursts, for each of which massive stars are believed to play a crucial role. This book is ideal for graduate students and researchers in astrophysics interested in luminous hot stars and galaxy evolution.
