

Stellar Feedback and H II Regions: How Stars Affect their Environment

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Stars have a remarkable influence on their surroundings during their lifetime and when they die. They inject energy, momentum, and new elements into their environment, creating a continuous feedback loop. From the small injection scales up to galactic scales, the resulting cascade of mass and energy fluxes generated by stellar feedback constitutes one of the main driver of galaxy evolution. In this lecture, I will describe how stars, especially the massive ones, impact their immediate environment. I will review various mechanisms of stellar feedback that operate on distinct spatial and temporal scales. Additionally, I will demonstrate how cuttingedge, high-resolution, multi-wavelength observations of young star-forming regions in nearby galaxies, coupled with state-of-the-art numerical simulations, provide valuable insights into the nature and characterisation of these processes.