Watching Galaxy Evolution in High Definition Dr. Jane Rigby

As Einstein predicted, mass deflects light. In hundreds of known cases, "gravitational lenses" have deflected, distorted, and amplified images of galaxies or quasars behind them. As such, gravitational lensing is a way to "cheat" at studying how galaxies evolve, because lensing can magnify galaxies by factors of 10--100 times, transforming them from objects we can barely detect to bright objects we can study in detail. I'll summarize new results from a comprehensive program, using multi-wavelength, high-quality spectroscopy, to study how galaxies formed stars at redshifts of 1--3, the epoch when most of the Universe's stars were formed.