



Figure 1.2 The galaxy cluster 1E0657-56, a.k.a. the Bullet Cluster. All of the primary components of a galaxy cluster can be seen in this image: the X-ray ICM (pink), dark matter (blue), and galaxies. The brilliant white object with diffraction spikes is a star. This cluster has become very famous as the merger dynamics provide direct evidence for the existence of dark matter (Clowe et al., 2006). Image taken from NASA Press Release 06-297. Image credits: NASA/CXC/CfA/Markevitch et al. (2002) (X-ray); NASA/STScI/Magellan/U.Arizona/Clowe et al. (2006) (Optical); NASA/STScI/ESO WFI/Magellan/U.Arizona/Clowe et al. (2006) (Lensing).