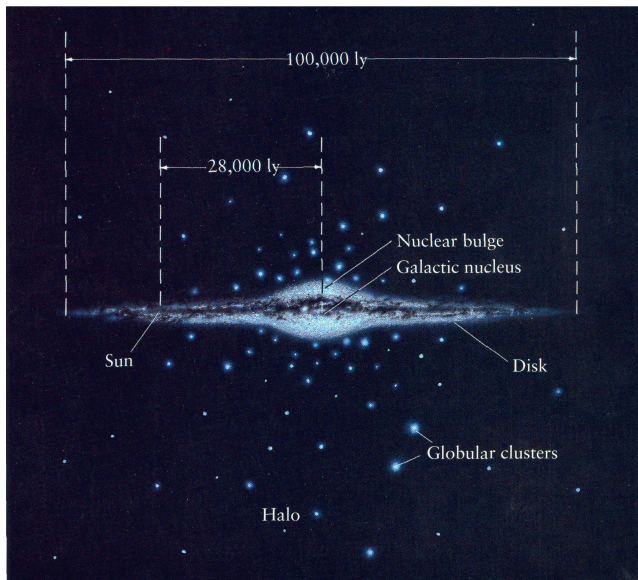
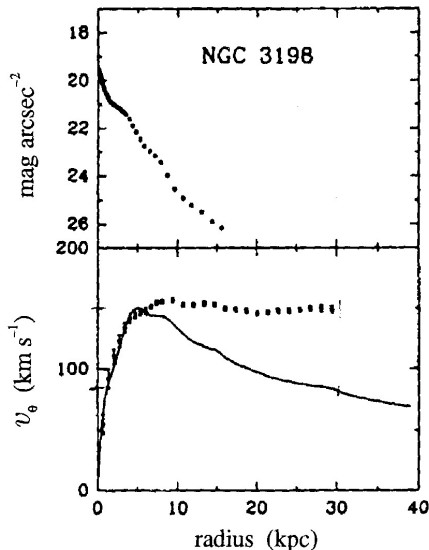


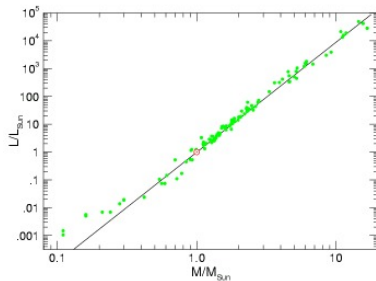
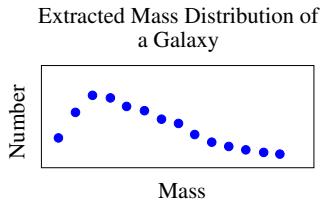
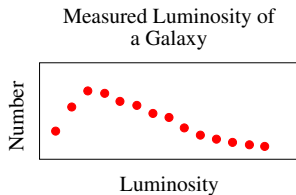


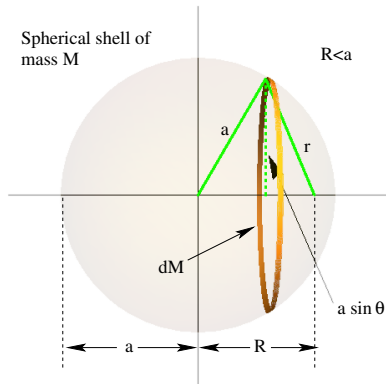
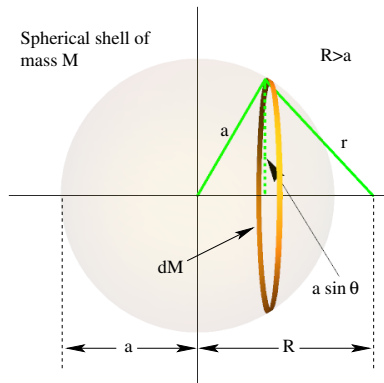
NGC3198

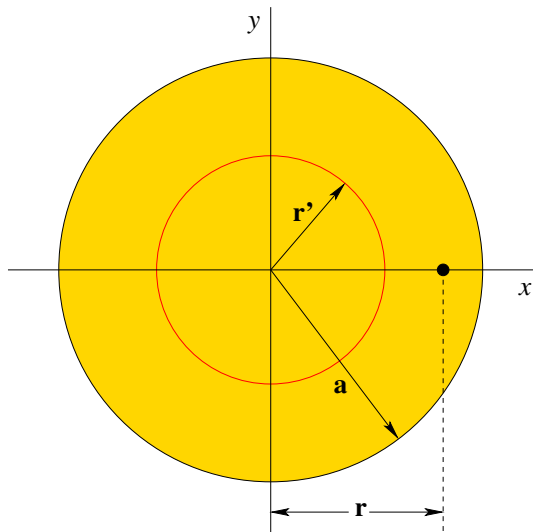


Consider the light profile (top panel) and rotation curve (bottom panel) for the spiral galaxy NGC3198. The bottom panel shows the observed rotation curve (dots) and the rotation curve (solid line) expected for the light distribution of the top panel. (1) What is the rotation curve implied by the measured light curve? (2) What is the density curve implied by the measured rotation curve? (3) What is the ratio of the masses calculated in Parts 1 and 2.



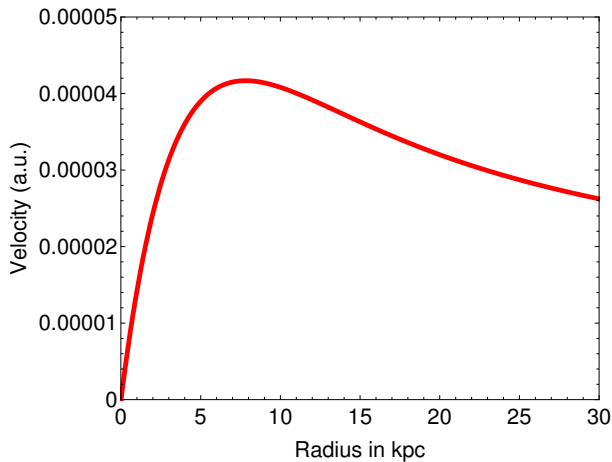


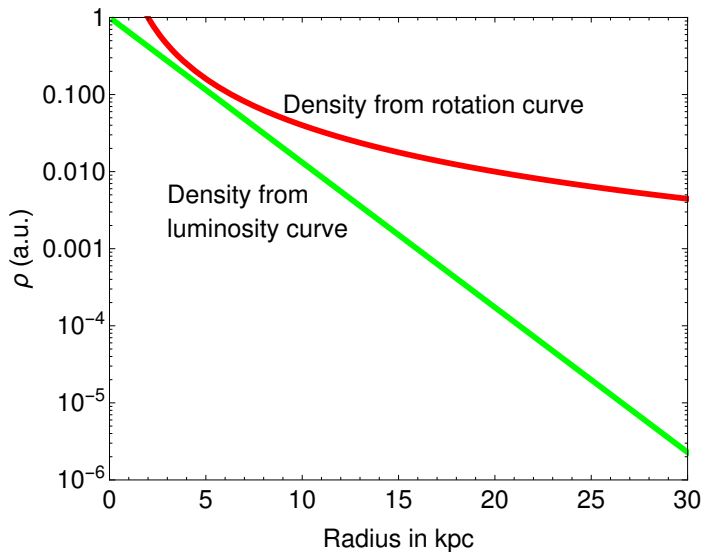


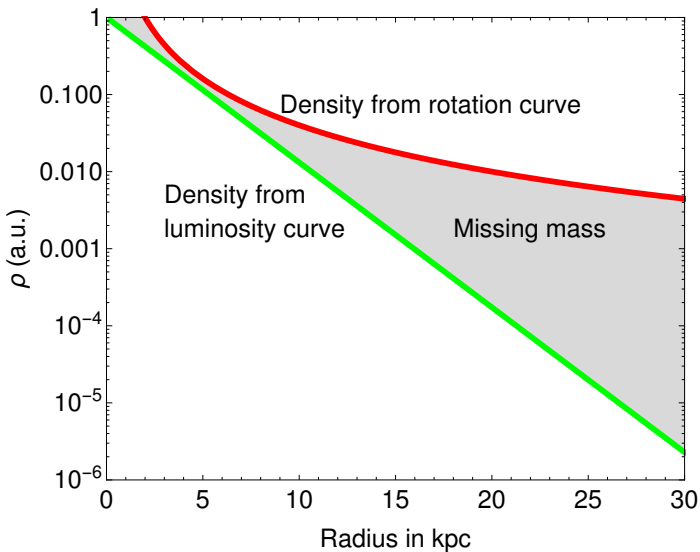


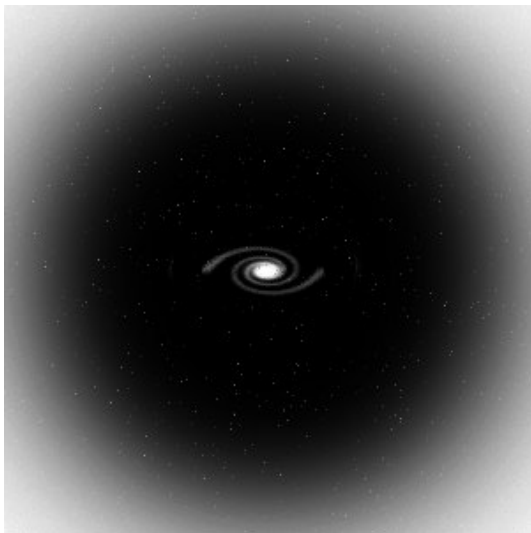
Rotation Curve Based on Observed Luminosity Distribution for NGC3198

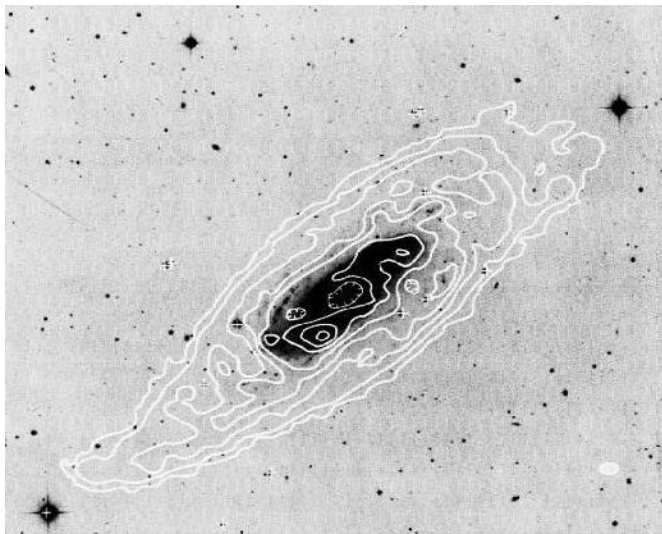
7











Radio image of NGC3198 atop a negative of an optical picture.