**Vmin**

**R0**

**KEY**

Y0: Initial “y” position of disrupting galaxy

V0: Initial velocity of disrupting galaxy

Vmin: Minimum velocity of disrupting galaxy

R0: Initial separation between the two galaxies

Rmin: Minimum separation between the two galaxies

**Ellipse**

**V0**

**Parabola**

**Hyperbola**

**Rmin**

**Y0**