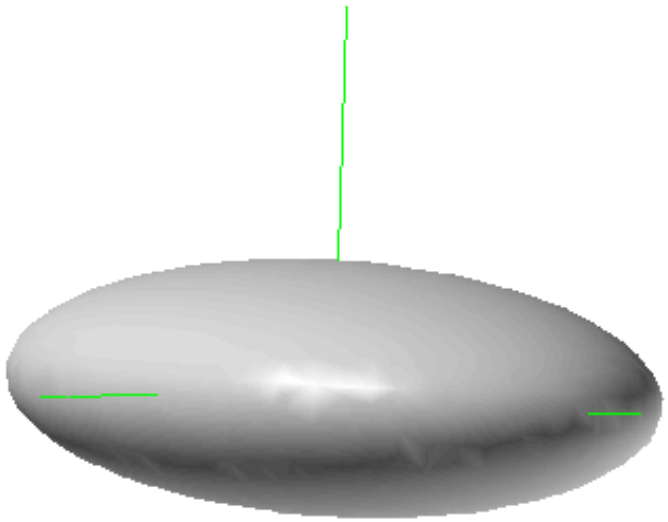
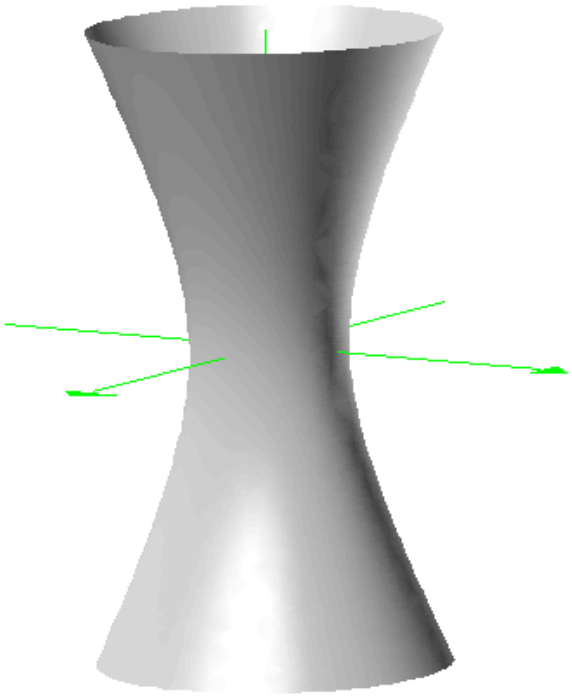
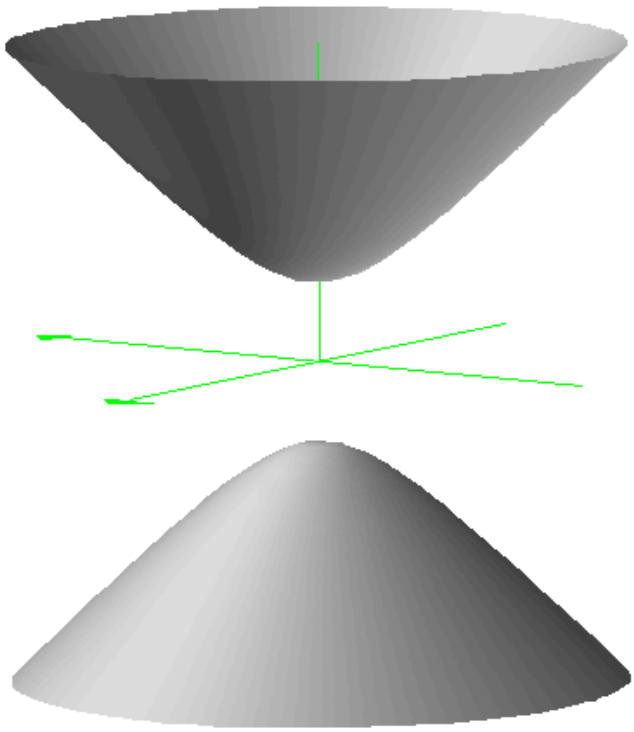
Ellipsoid: $\left(\frac{x}{2}\right)^2 + \left(\frac{y}{3}\right)^2 + \left(\frac{z}{1}\right)^2 = 1$

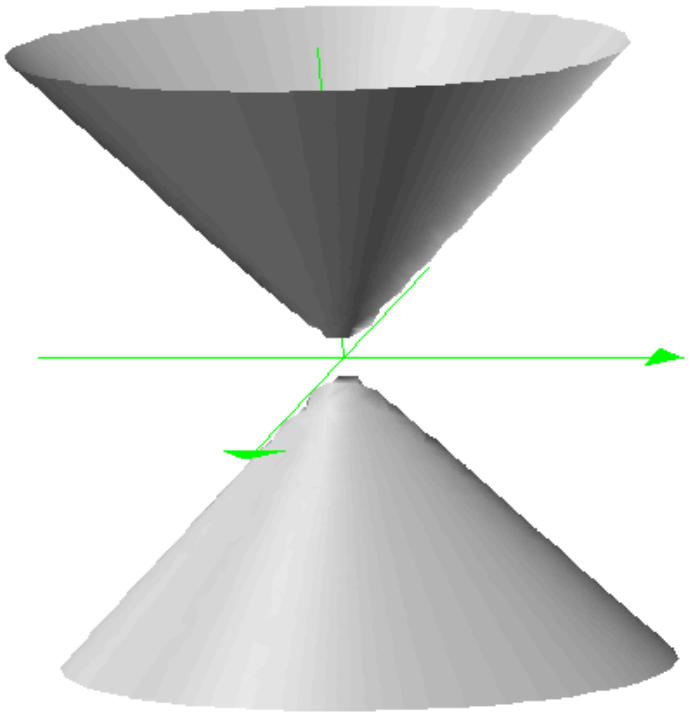




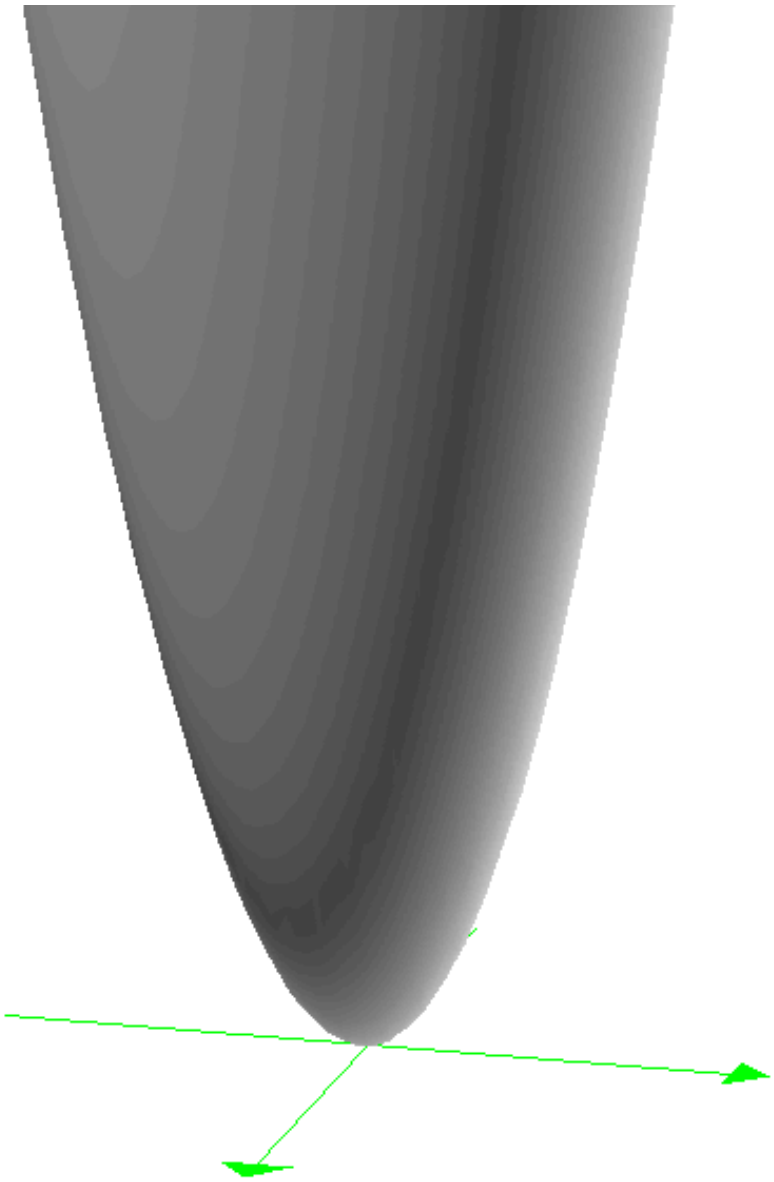
Enmantlad hyperboloid: $\left(\frac{x}{a_1}\right)^2 + \left(\frac{y}{a_2}\right)^2 - \left(\frac{z}{a_2}\right)^2 = 1$



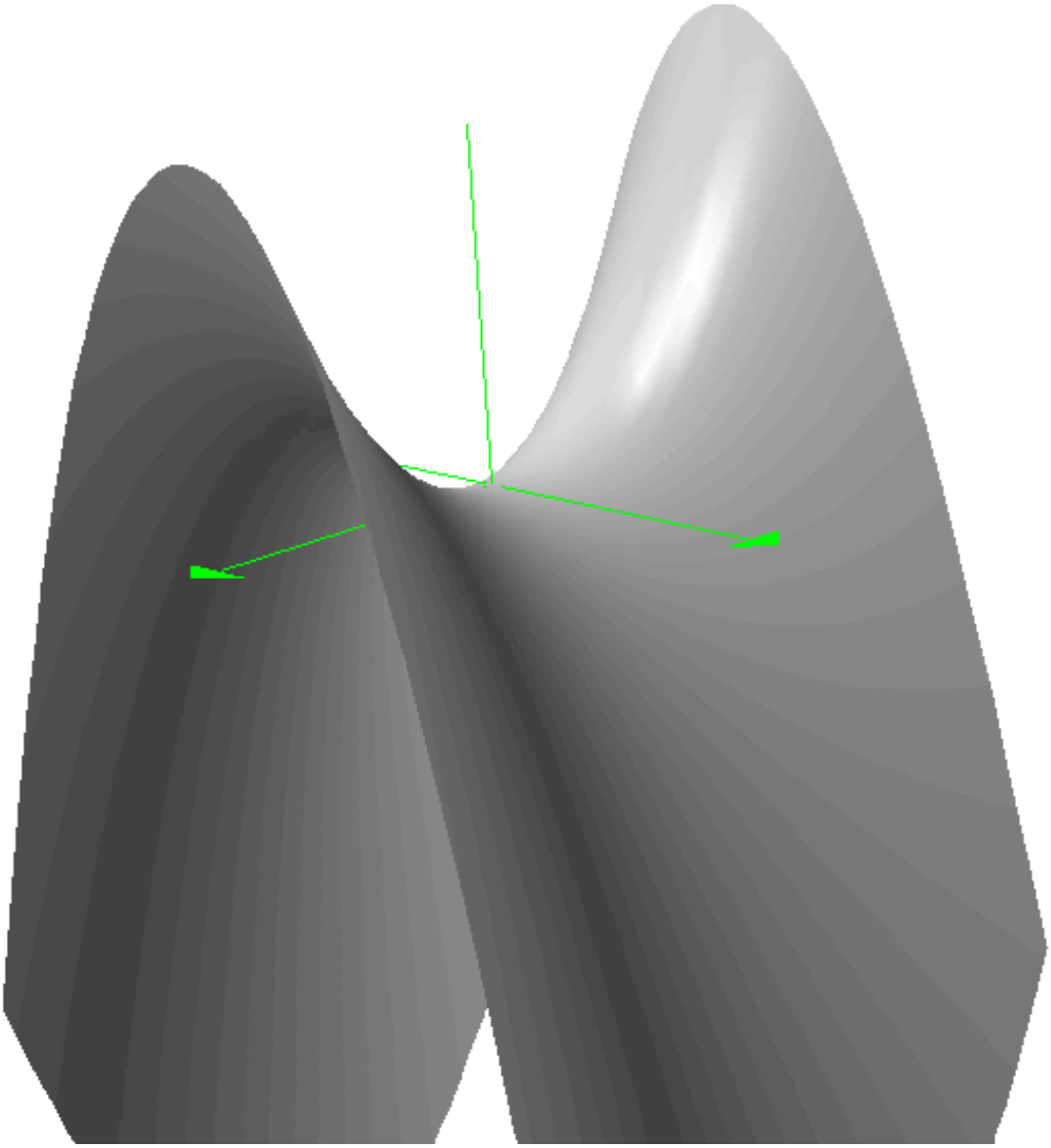
Tvåmantlad hyperboloid: $-\left(\frac{x}{a_1}\right)^2 - \left(\frac{y}{a_2}\right)^2 + \left(\frac{z}{a_2}\right)^2 = 1$



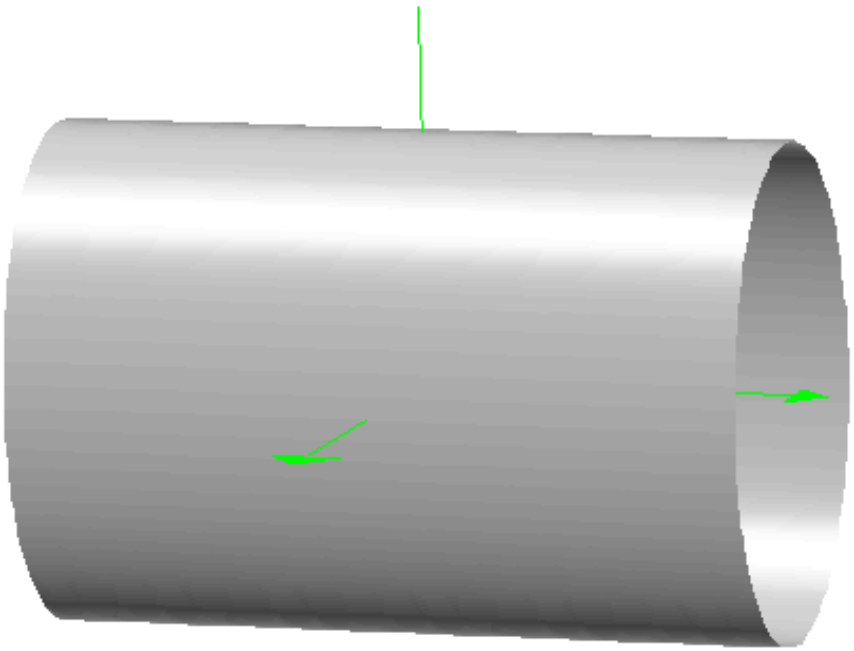
Elliptisk (dubbelkon): $\left(\frac{x}{1}\right)^2 + \left(\frac{y}{2}\right)^2 - \left(\frac{z}{2}\right)^2 = 0$



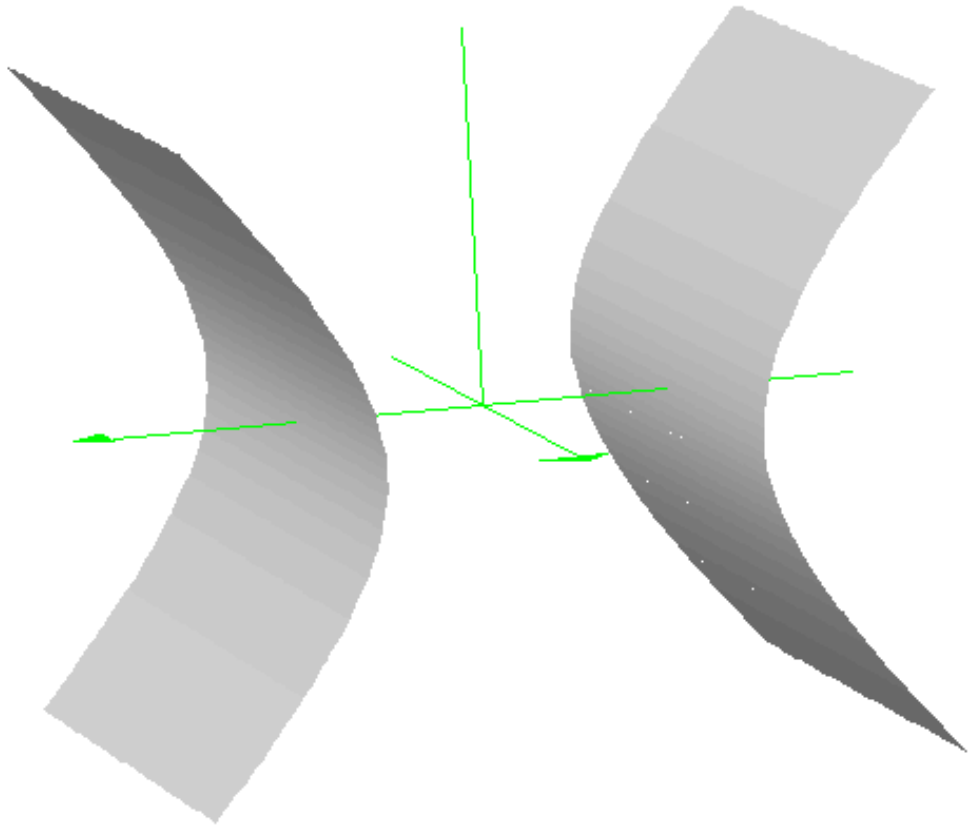
Elliptisk paraboloid: $\left(\frac{x}{1}\right)^2 + \left(\frac{y}{2}\right)^2 = z$



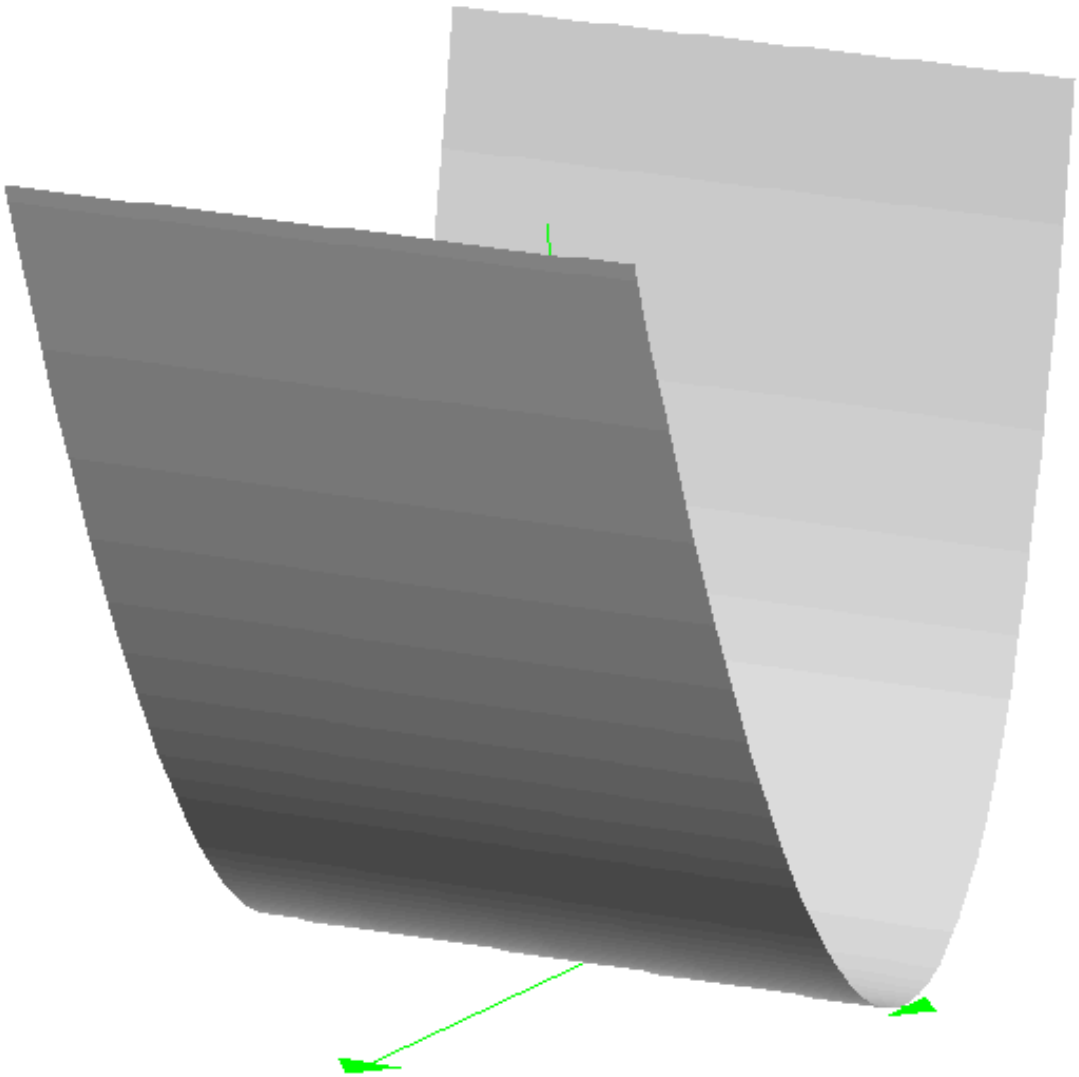
Hyperbolisk paraboloid: $\left(\frac{x}{3}\right)^2 - \left(\frac{y}{2}\right)^2 = z$



Elliptisk cylinder: $\left(\frac{x}{2}\right)^2 + \left(\frac{z}{4}\right)^2 = 1$



Hyperbolisk cylinder: $\left(\frac{x}{2}\right)^2 - \left(\frac{z}{3}\right)^2 = 1$



Parabolisk cylinder: $\left(\frac{x}{2}\right)^2 = z$