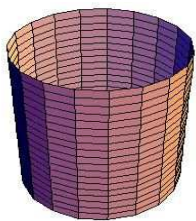
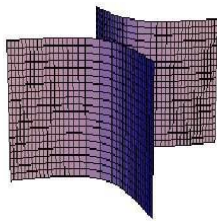


Cuádricas en $\mathbb{R}^3$. $a_j > 0$ para $j = 1, 2, 3$.**Cilindro elíptico**

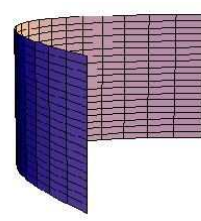
$$a_1x^2 + a_2y^2 = 1$$

Imaginario

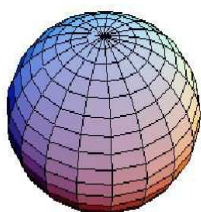
$$a_1x^2 + a_2y^2 = -1$$

**Cilindro hiperbólico**

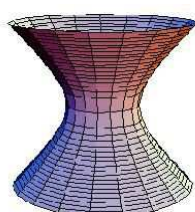
$$a_1x^2 - a_2y^2 = 1$$

**Cilindro parabólico**

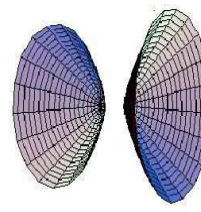
$$a_1x^2 = 2y$$

**Elipsoide**

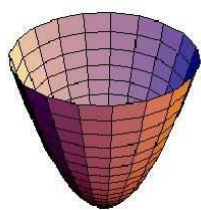
$$a_1x^2 + a_2y^2 + a_3z^2 = 1$$

**Hiperboloide de una hoja**

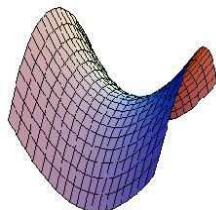
$$a_1x^2 + a_2y^2 - a_3z^2 = 1$$

**Hiperboloide de dos hojas**

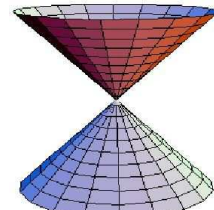
$$a_1x^2 - a_2y^2 - a_3z^2 = 1$$

**Paraboloide elíptico**

$$a_1x^2 + a_2y^2 = 2z$$

**Paraboloide hiperbólico**

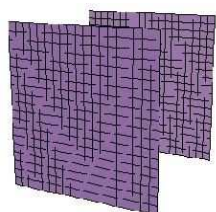
$$a_1x^2 - a_2y^2 = 2z$$

**Cono**

$$a_1x^2 + a_2y^2 - a_3z^2 = 0$$

Imaginario

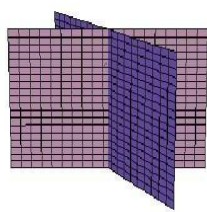
$$a_1x^2 + a_2y^2 + a_3z^2 = 0$$

**Planos paralelos**

$$a_1x^2 = 1$$

Imaginario

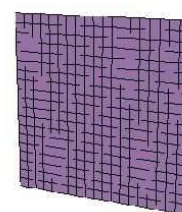
$$a_1x^2 = -1$$

**Planos secantes**

$$a_1x^2 - a_2y^2 = 0$$

Imaginario

$$a_1x^2 + a_2y^2 = 0$$

**Plano doble**

$$x^2 = 0$$