

What does  $\varepsilon$ -approximation mean here?

$$\forall x \in F(\varepsilon), \forall j, \quad -x_j^2 + x_j \leq \varepsilon.$$



$$x_j \in \left[0, \frac{1}{2} - \sqrt{\frac{1}{4} - \varepsilon}\right] \cup \left[\frac{1}{2} + \sqrt{\frac{1}{4} - \varepsilon}, 1\right]$$

so that for small  $\varepsilon > 0$ ,  $\text{conv}(F(\varepsilon))$   
is a very good approximation of  $\text{conv}(F)$ .

