

Theorem: Let  $U \supset F$  be an open convex set. Then  $\exists \delta > 0$  such that if  $D_2$  is a  $\delta$ -net of  $S^n$  then

$$\text{conv}(F) \subseteq C_k \subset U \quad \text{for some finite } k.$$

↑  
applies to both SDP and LP relaxation methods

Kojima, T. (Math. Prog. [2000])