## Hint about constraints on $C'^*_\infty$

Find an answer to the following questions, following the order of presentation:

- 1) Consider a degenerate conic  $C_o$  of rank 2. How is it constituted? How can it be written?
- 2) What is the RNS of  $\mathcal{C}_o$ ? Consider this as a "Theorem"
- 3) Consider duality. What is the dual Theorem?
- 4) Apply this theorem to  $C_\infty^*$  as it is a rank-2 degenerate dual conic: what is the RNS of this dual conic
- 5) Apply the last fact to the image  ${\cal C}'^*_\infty$  of  ${\cal C}^*_\infty$ : what is the RNS of this matrix?

Now you have two additional constraints on  $\mathcal{C}'^*_\infty$