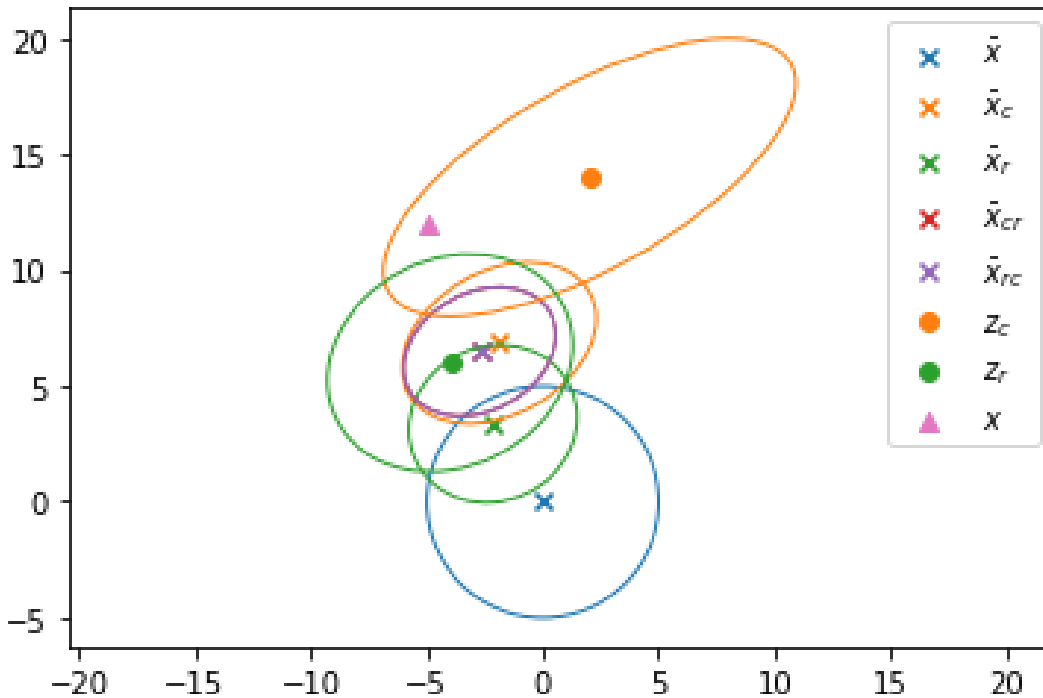


TTK4250 – Assignment 2

Task 2)

g)



$\bar{x}_{cr} = \bar{x}_{rc} = [-2.71834805 \quad 6.48717451]$

$P_{cr} = P_{rc} = \begin{bmatrix} 10.704314 & 2.3260641 \\ 2.3260641 & 7.76760785 \end{bmatrix}$

Here we have performed the update of the sensor for both the measurements in \bar{x}_{cr} and \bar{x}_{rc} . What we observe is that the distributions (which are gaussian and therefore characterized by the means \bar{x}_{rc} and \bar{x}_{cr} and the covariances P_{rc} and P_{cr}) are identical. This means that the order in which we condition does not matter.