



### Exercise 1

For parallel illumination of the sample the beam crossover after the lens  $\mathcal{C}2$  needs to be placed in the focal point of the lens  $\mathcal{C}3$ . Keeping the focal point of lens  $\mathcal{C}1$  fixed, the focal points of lens  $\mathcal{C}2$  and  $\mathcal{C}3$  can be changed such that the crossover point after the lens  $\mathcal{C}2$  falls in the focal point of  $\mathcal{C}3$ .