Entrainement aux constructions géométriques des pupilles

→ tracés #1 #2 #3 #4 #5 #6

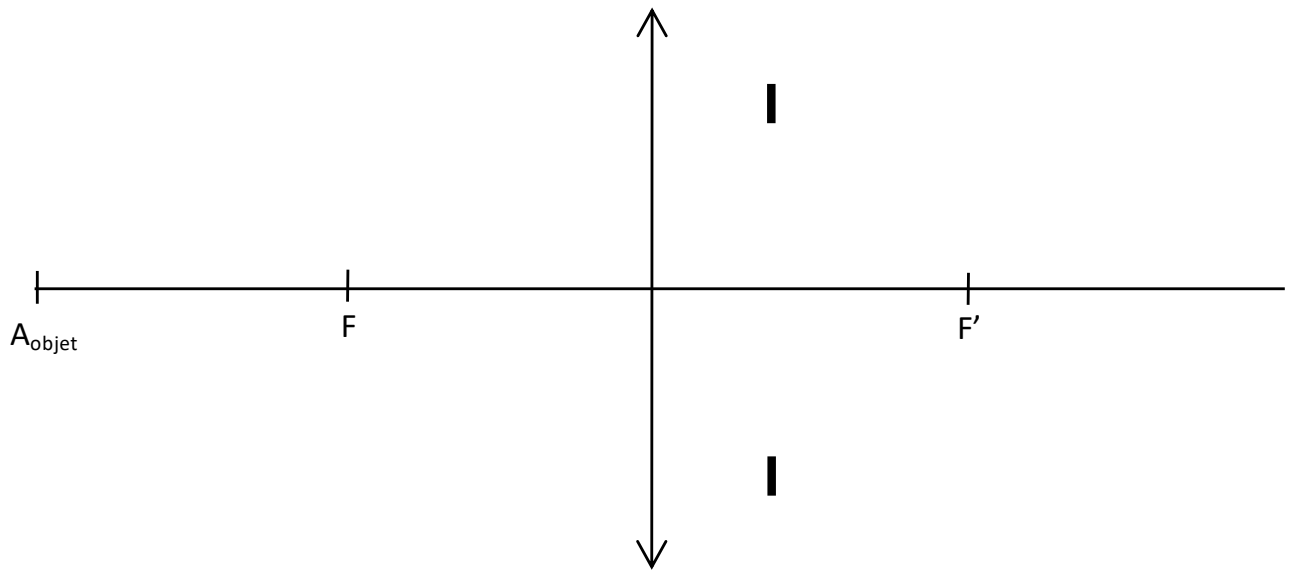
- positionner les pupilles.
- tracer deux rayons s'appuyant sur les deux bords de la pupille d'entrée, et traversant tout l'objectif, provenant de objet ponctuel (A) positionné sur l'axe.

Entrainement aux constructions géométriques des champs transversaux

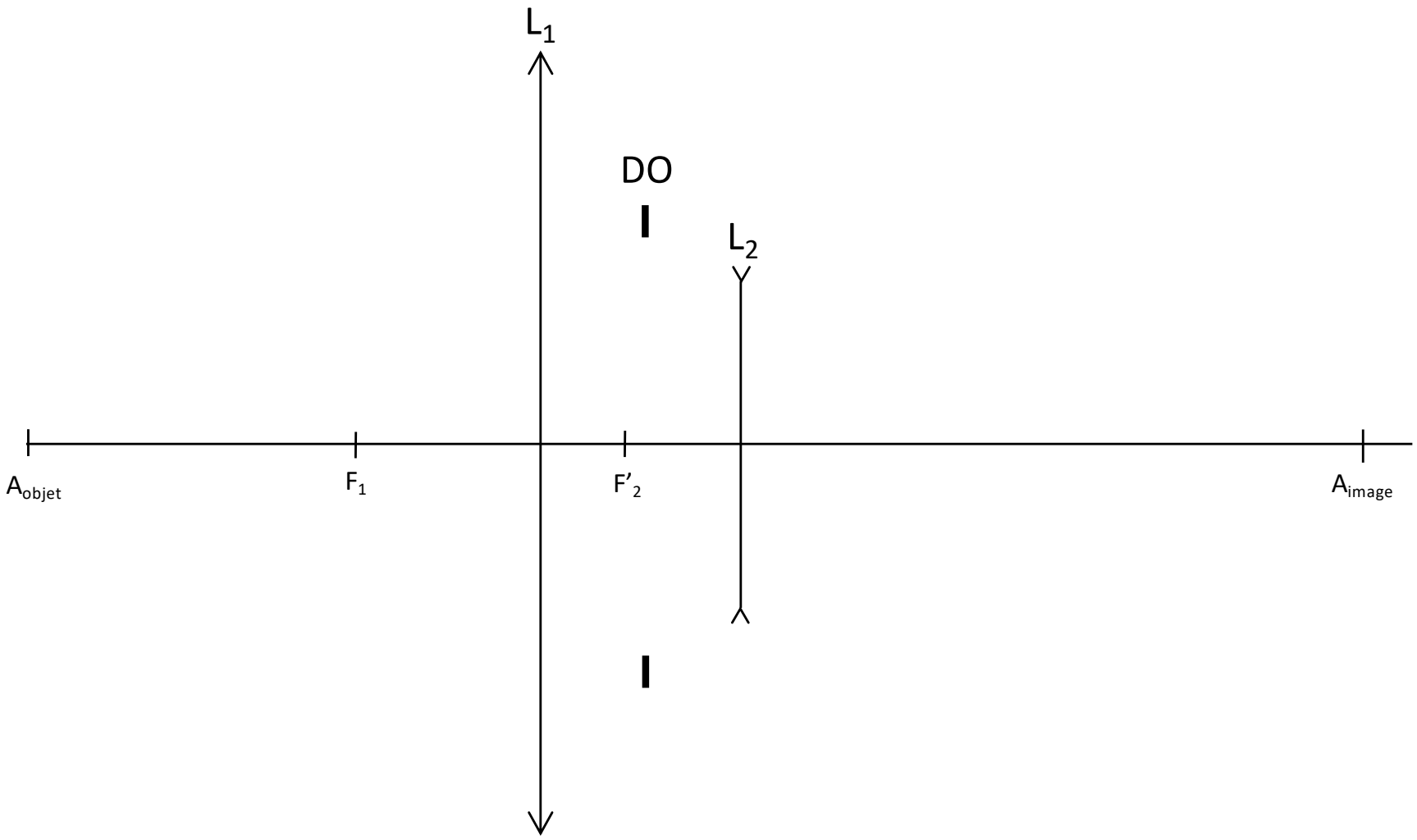
→ tracés #7 #8 #9 #10 #11

- positionner les pupilles.
- tracer deux rayons s'appuyant sur les deux bords de la pupille d'entrée, et traversant tout l'objectif, provenant d'un objet ponctuel (A) positionné sur l'axe.
- tracer deux rayons s'appuyant sur les deux bords de la pupille d'entrée, et traversant tout le système, provenant d'un objet ponctuel (A) positionné en bord du champ de pleine lumière.
- tracer le rayon qui délimite le champ total.

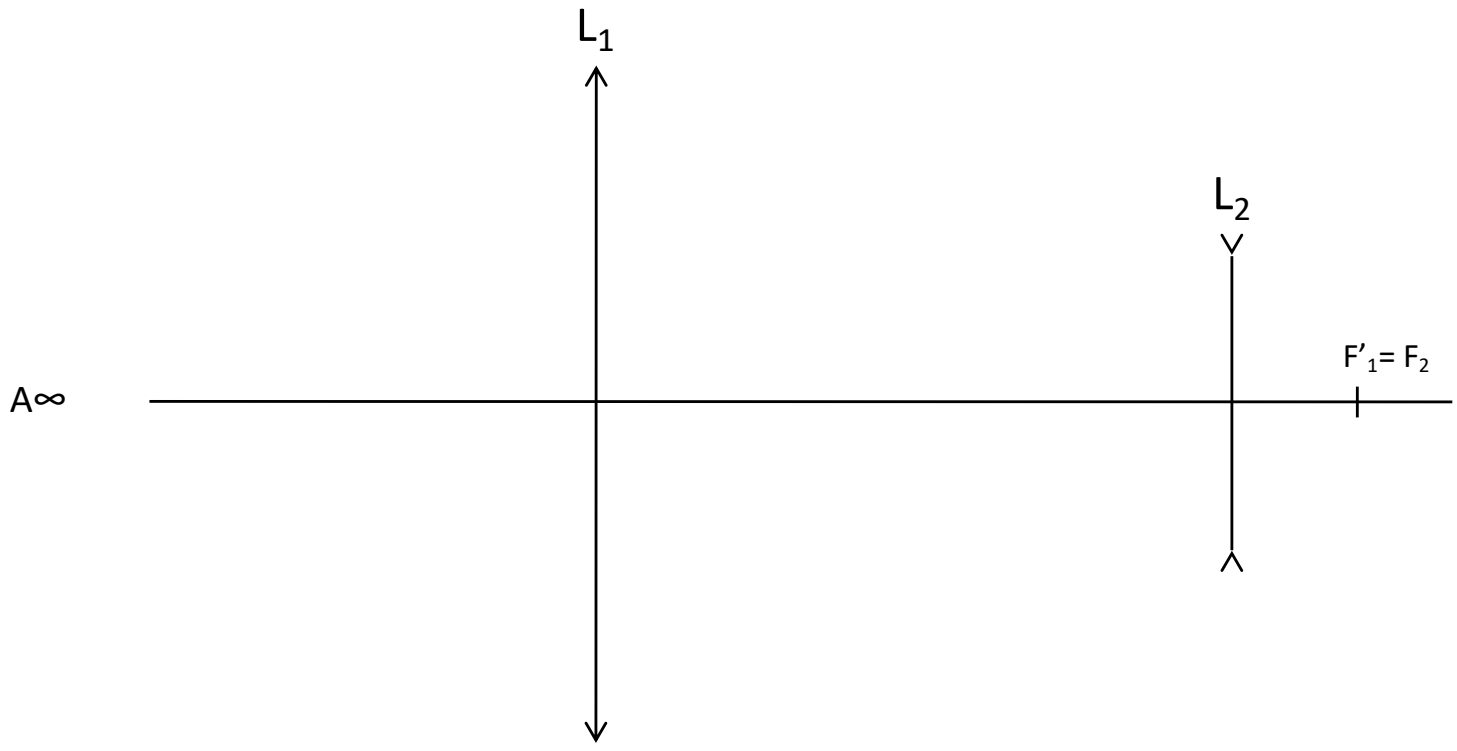
tracés pupilles #1



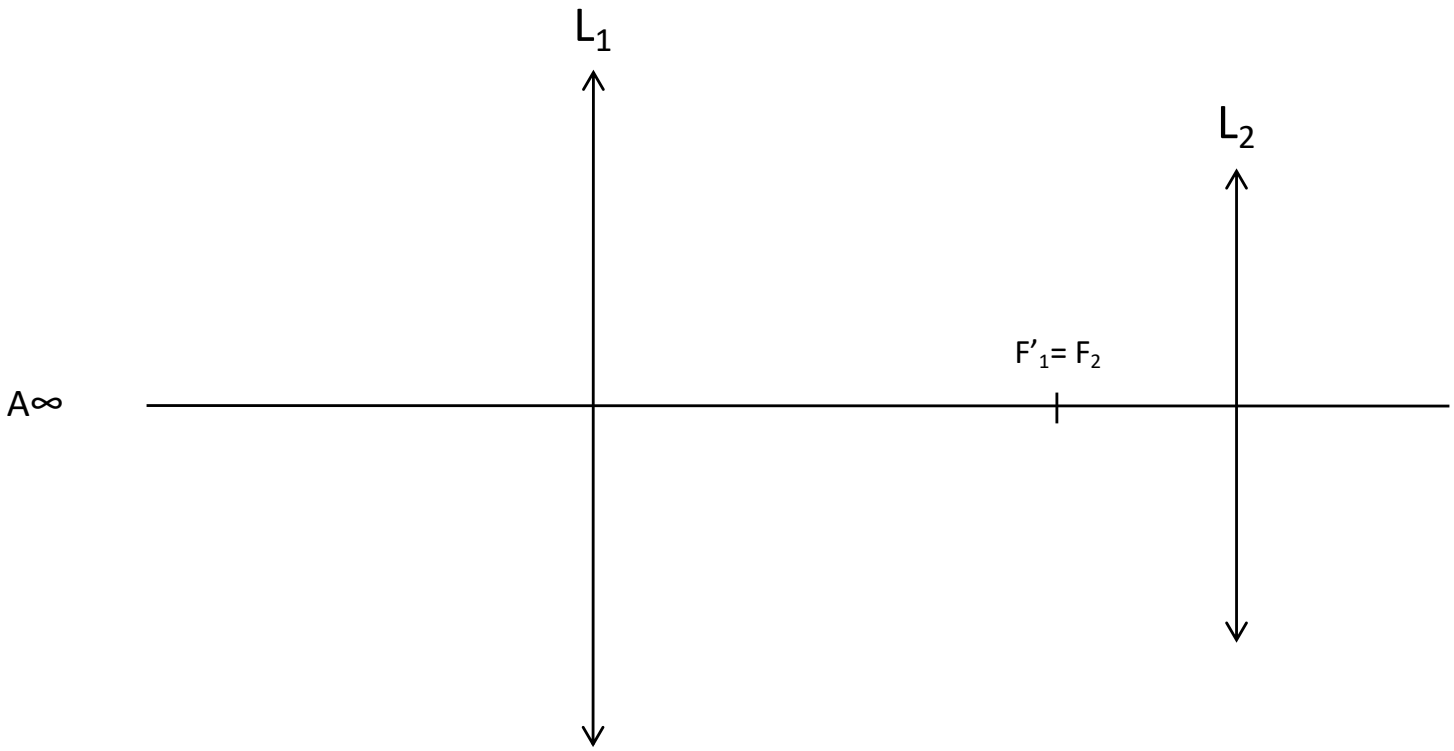
tracés pupilles #2



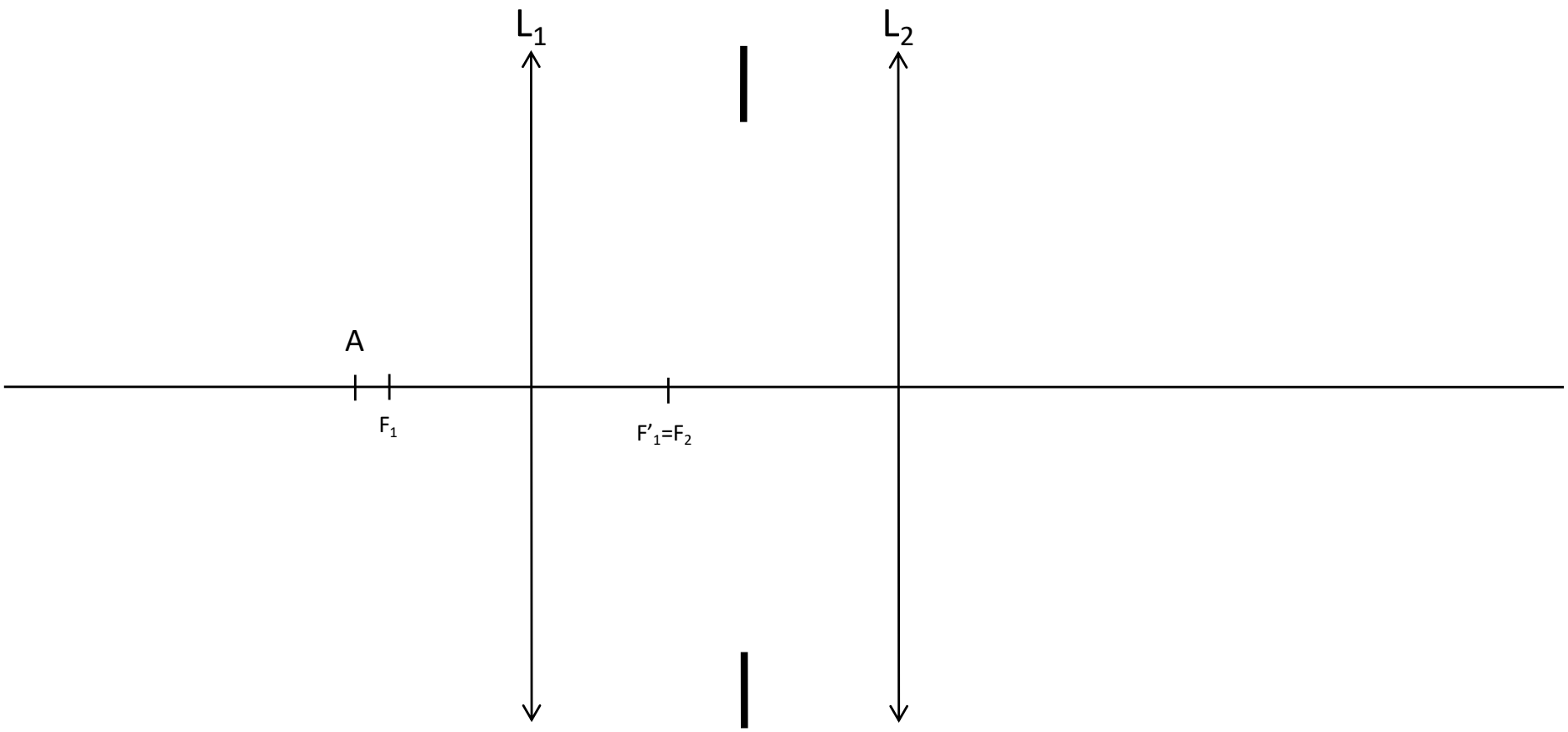
tracés pupilles #3



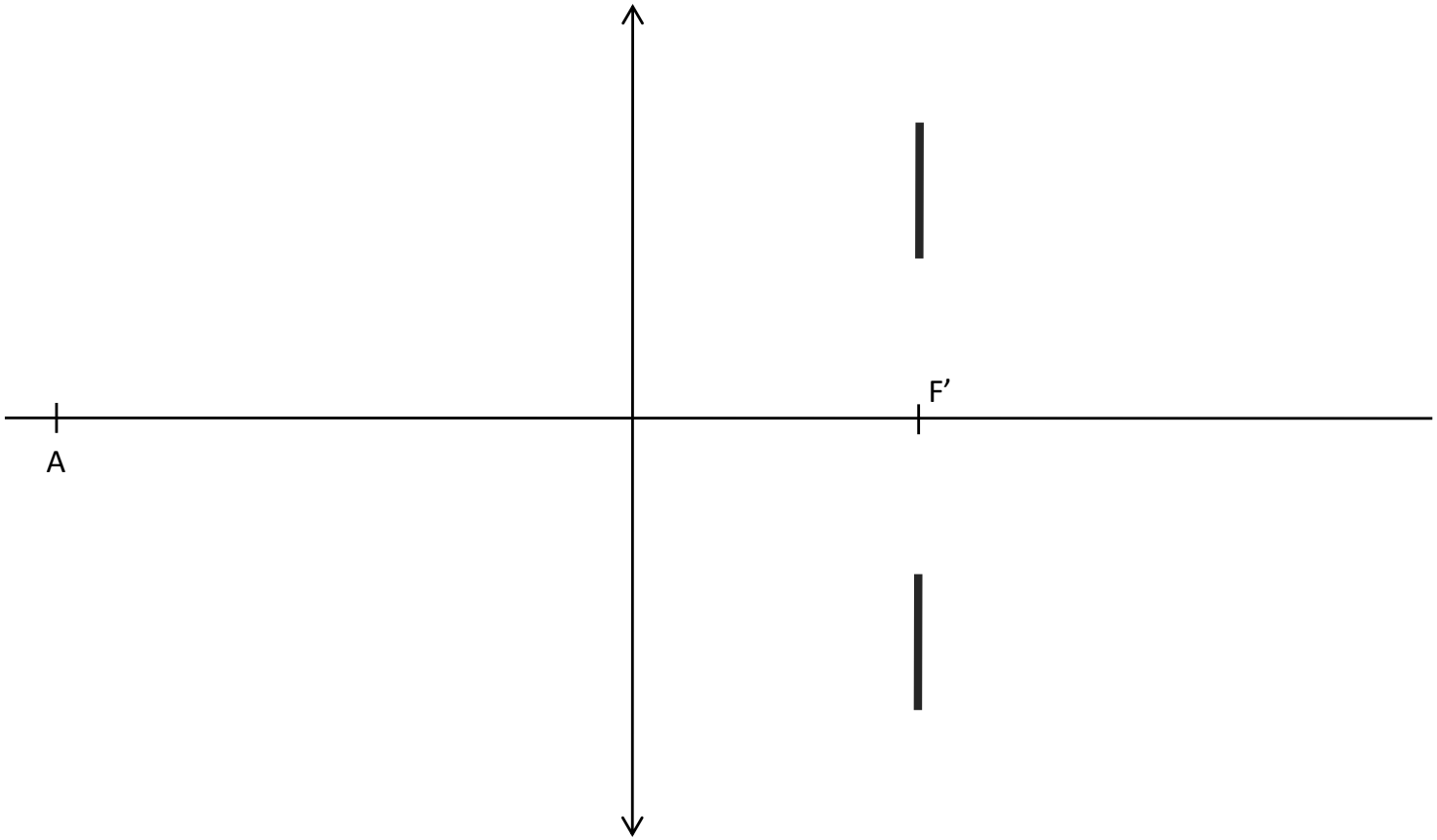
tracés pupilles #4



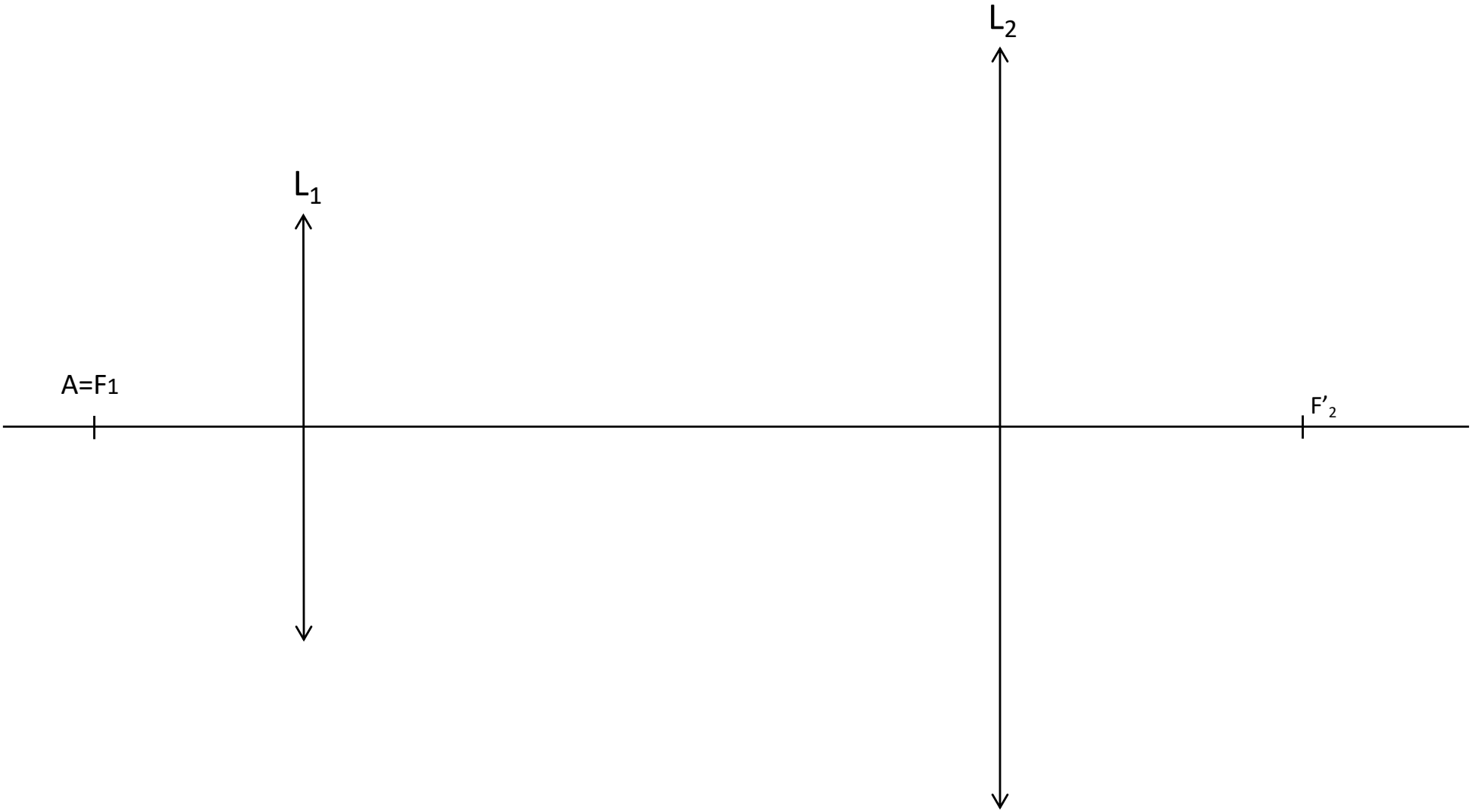
tracés pupilles #5



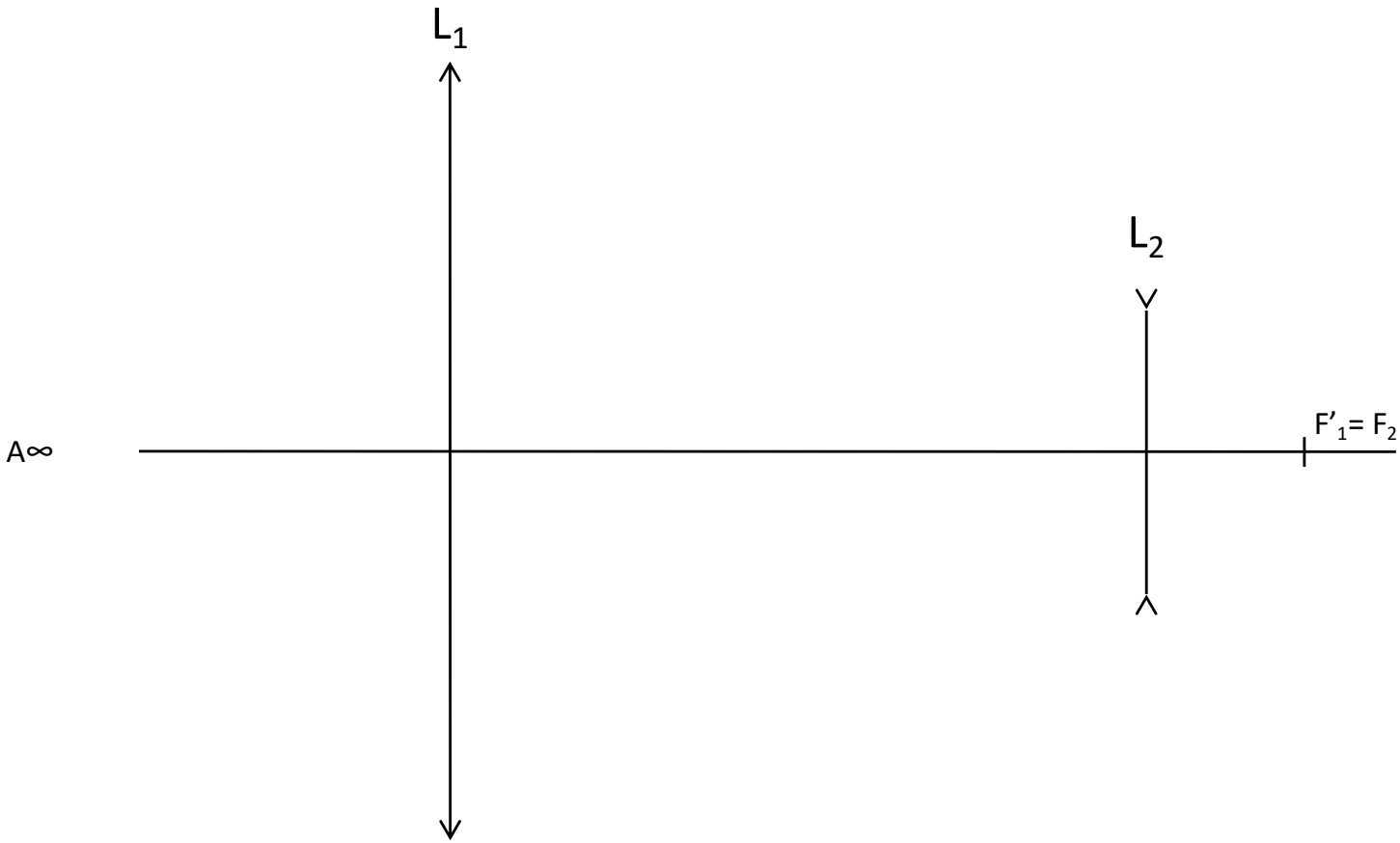
tracés pupilles #6



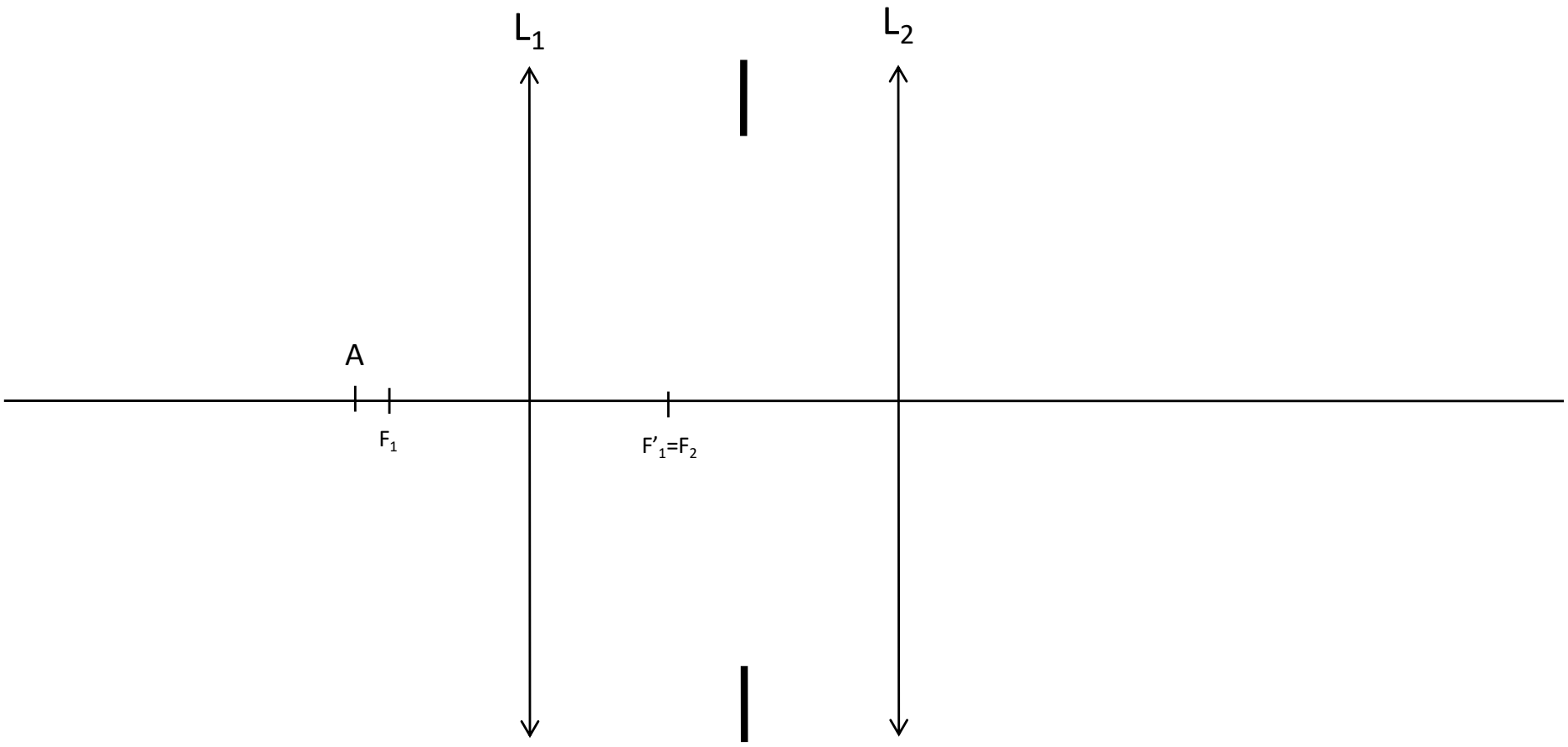
tracés pupilles & champs #7



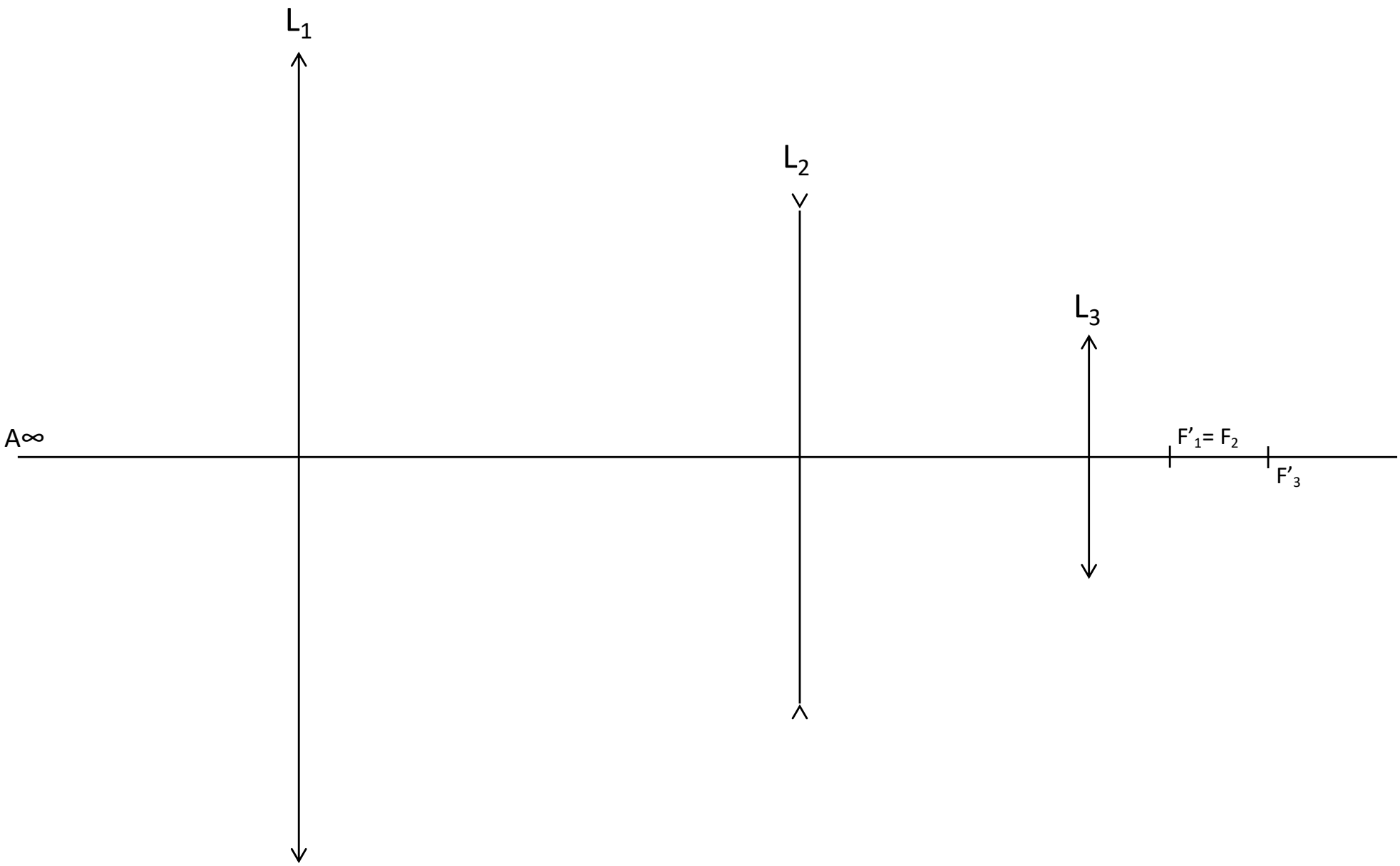
tracés pupilles & champs #8



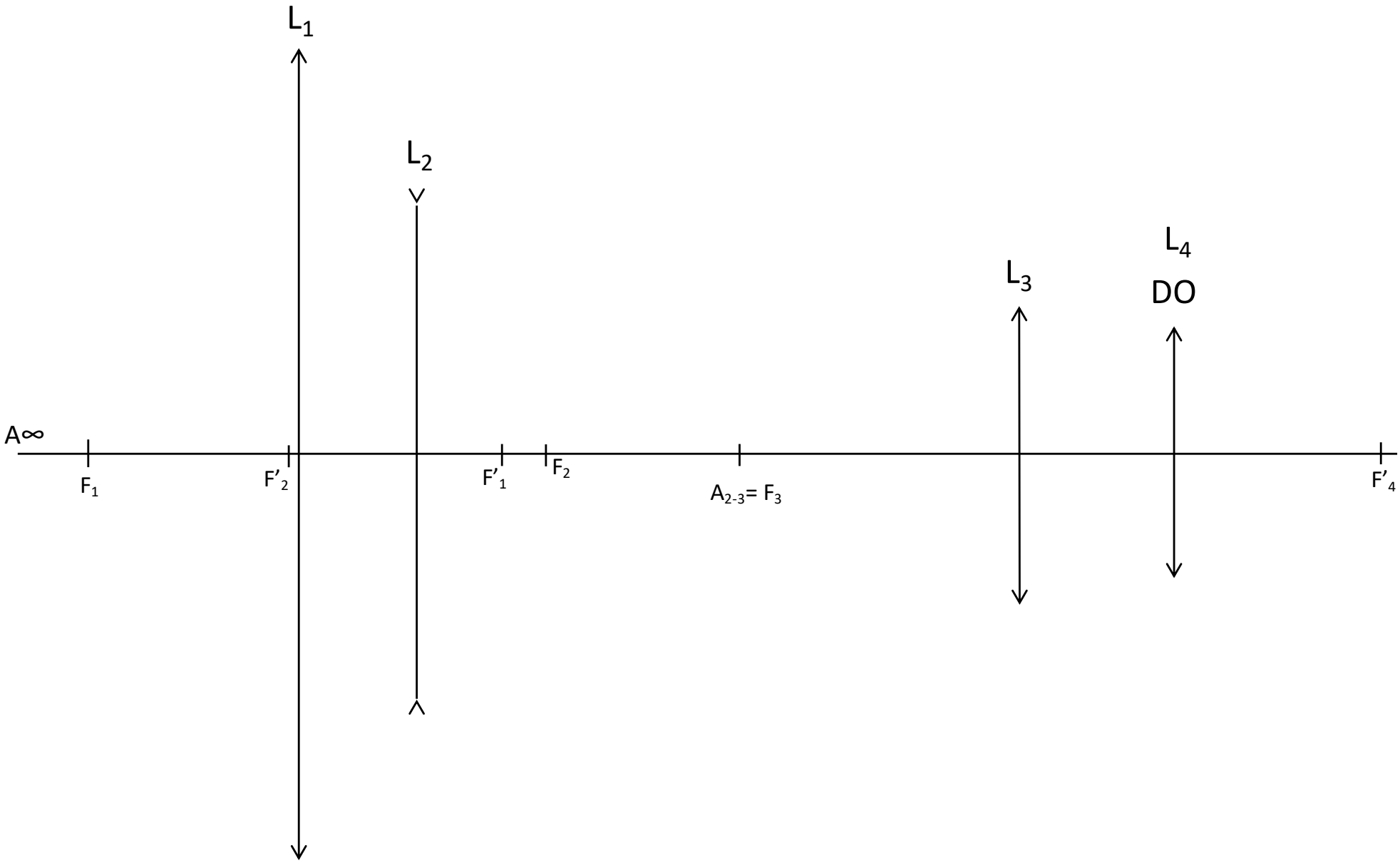
tracés pupilles & champs #9



tracés pupilles & champs #10

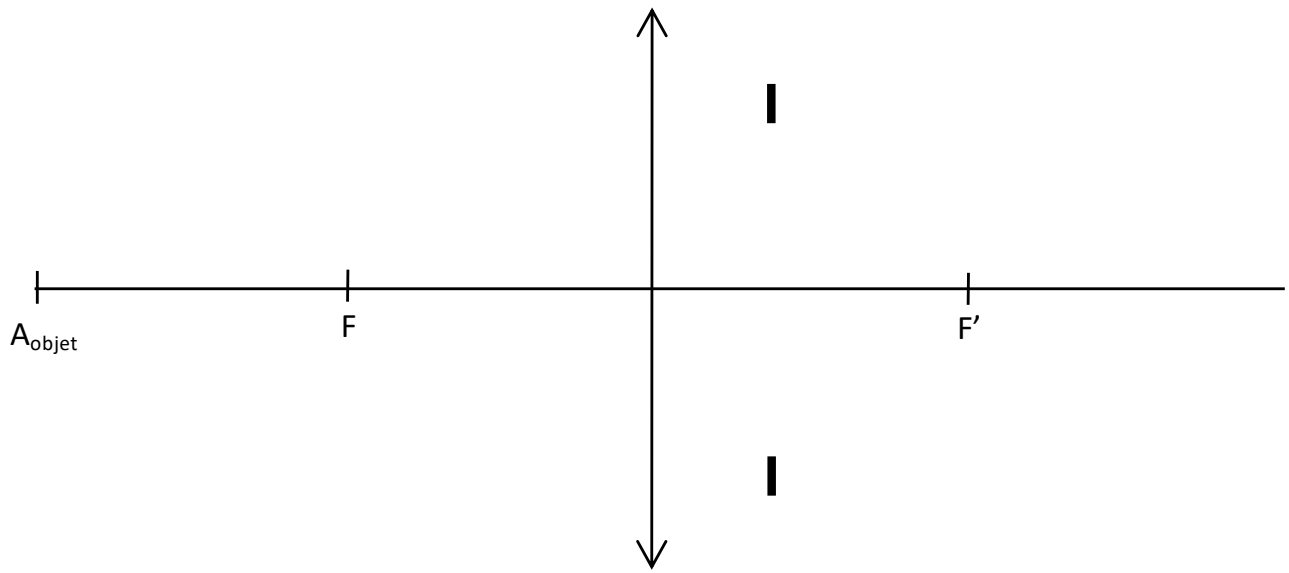


tracés pupilles & champs #11

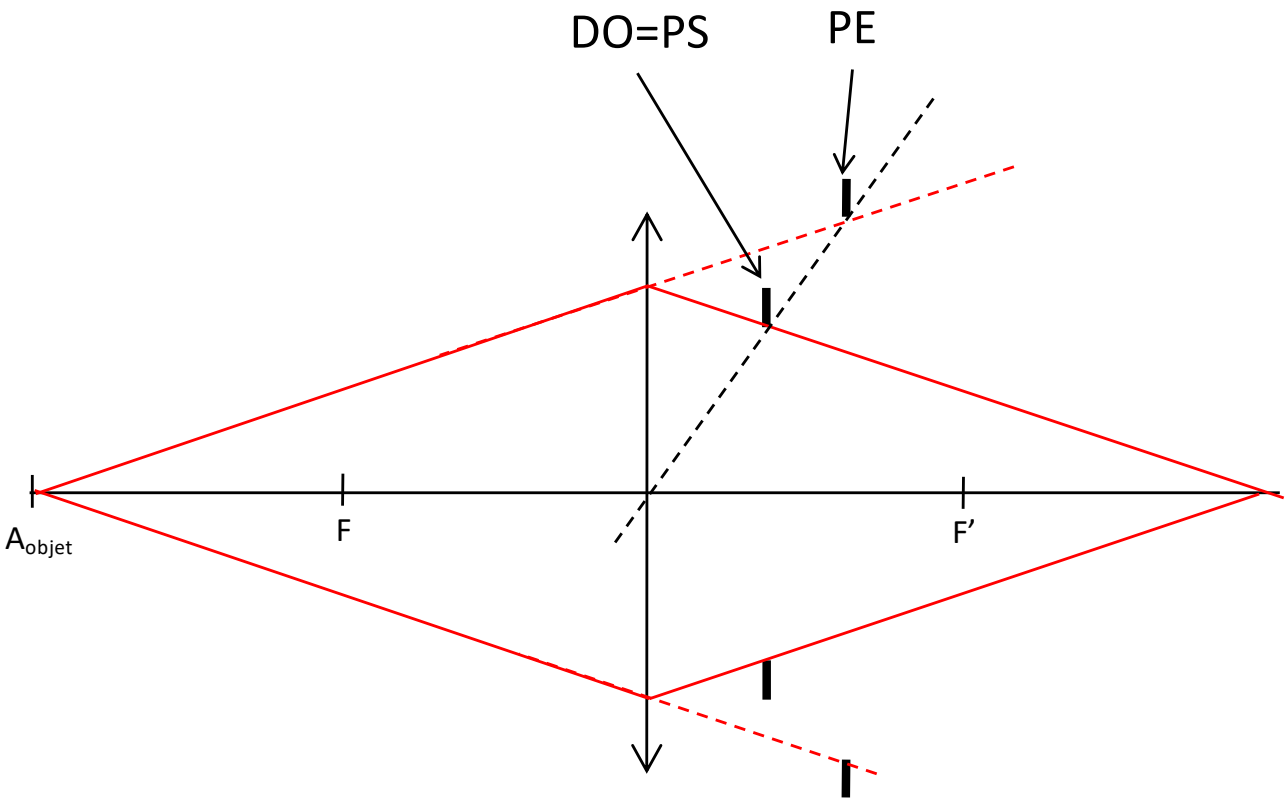


CORRECTION

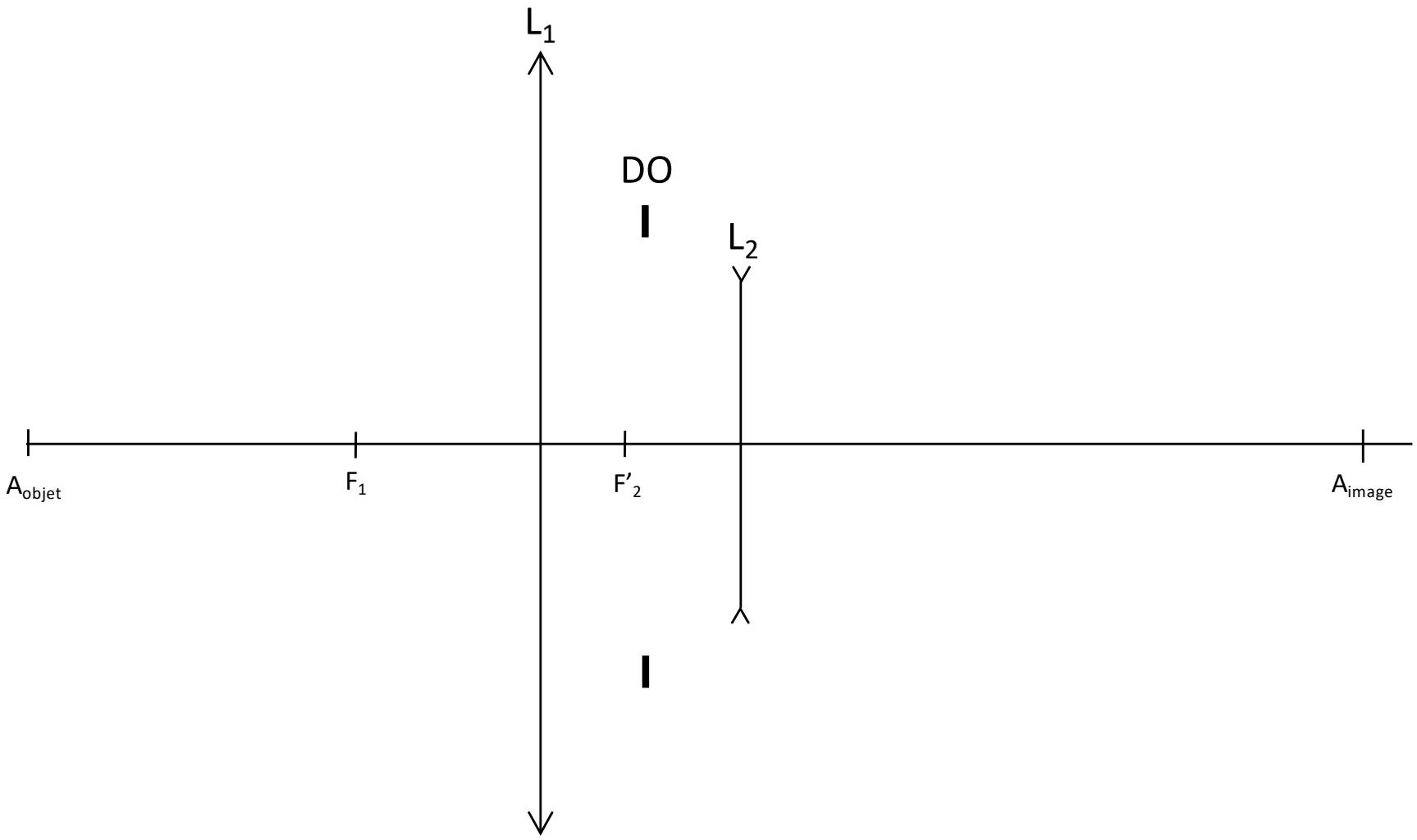
tracés pupilles #1



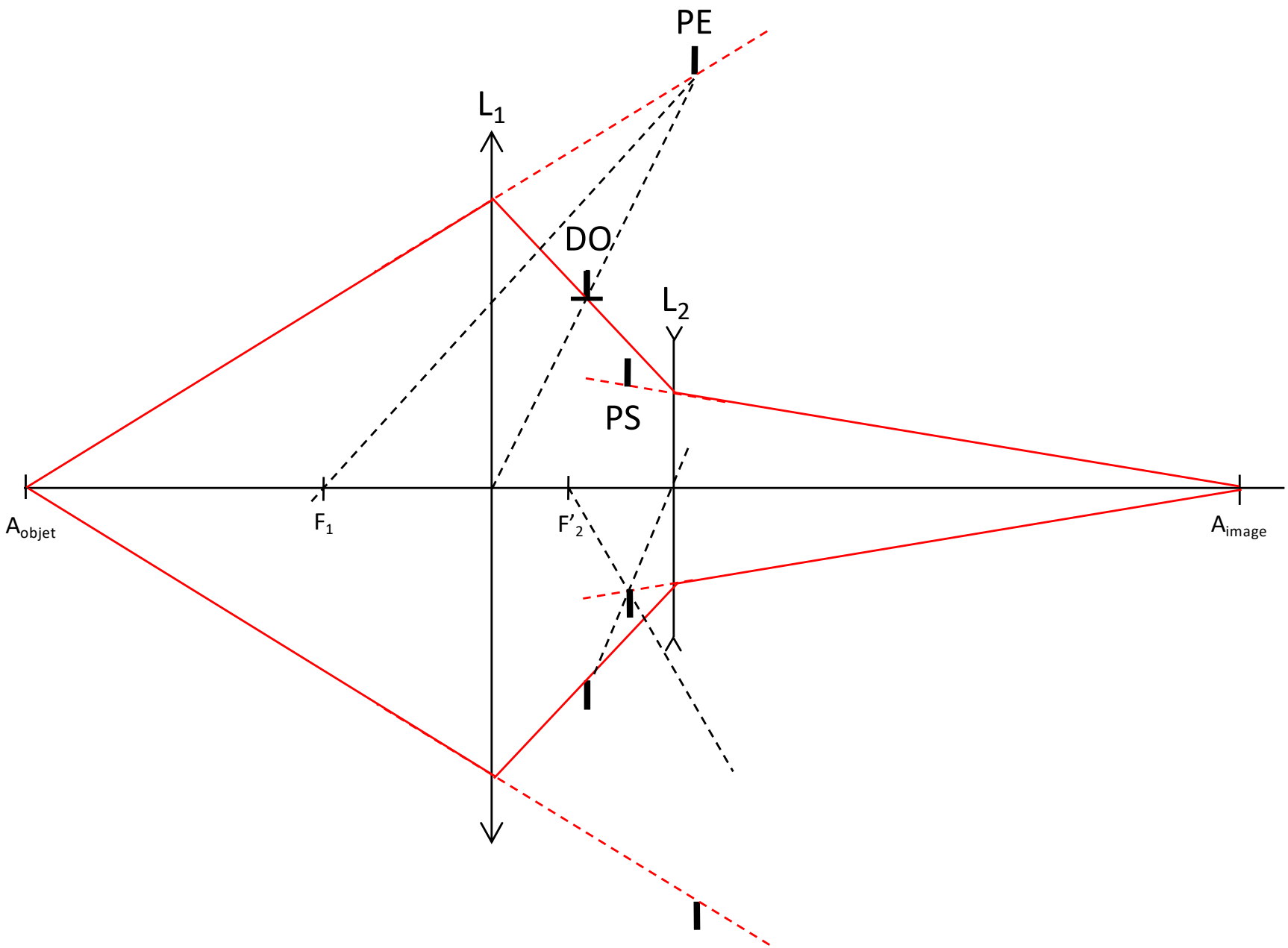
tracés pupilles #1



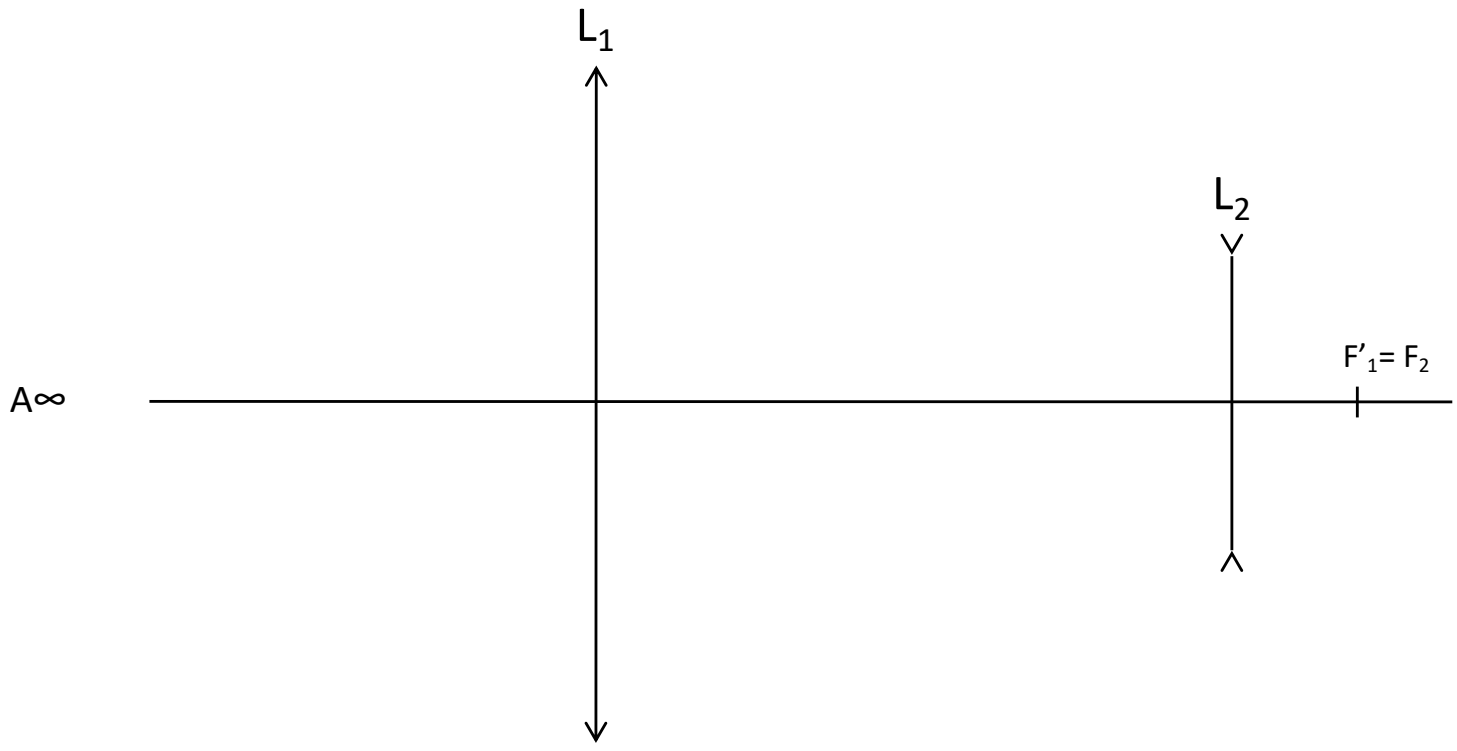
tracés pupilles #2



tracés pupilles #2



tracés pupilles #3



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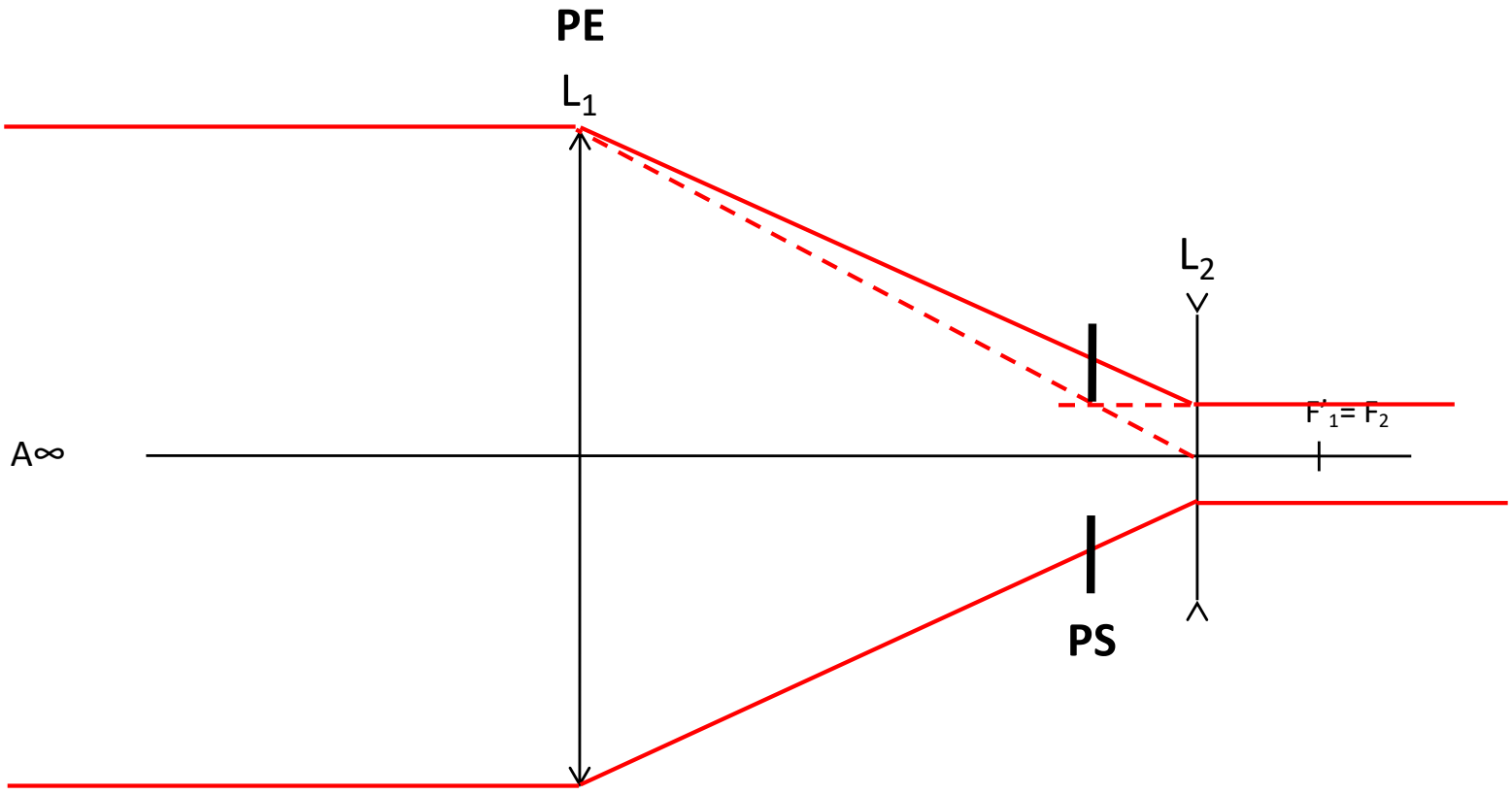
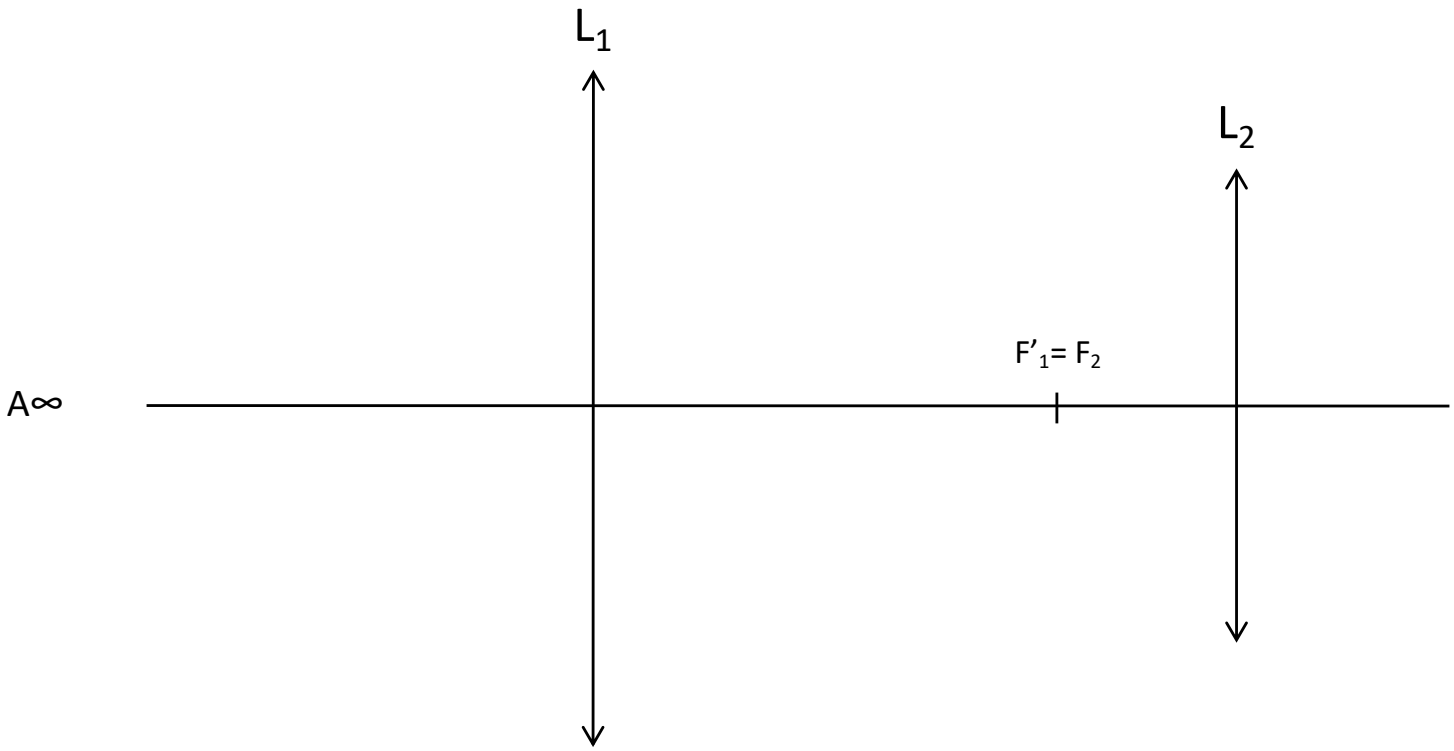
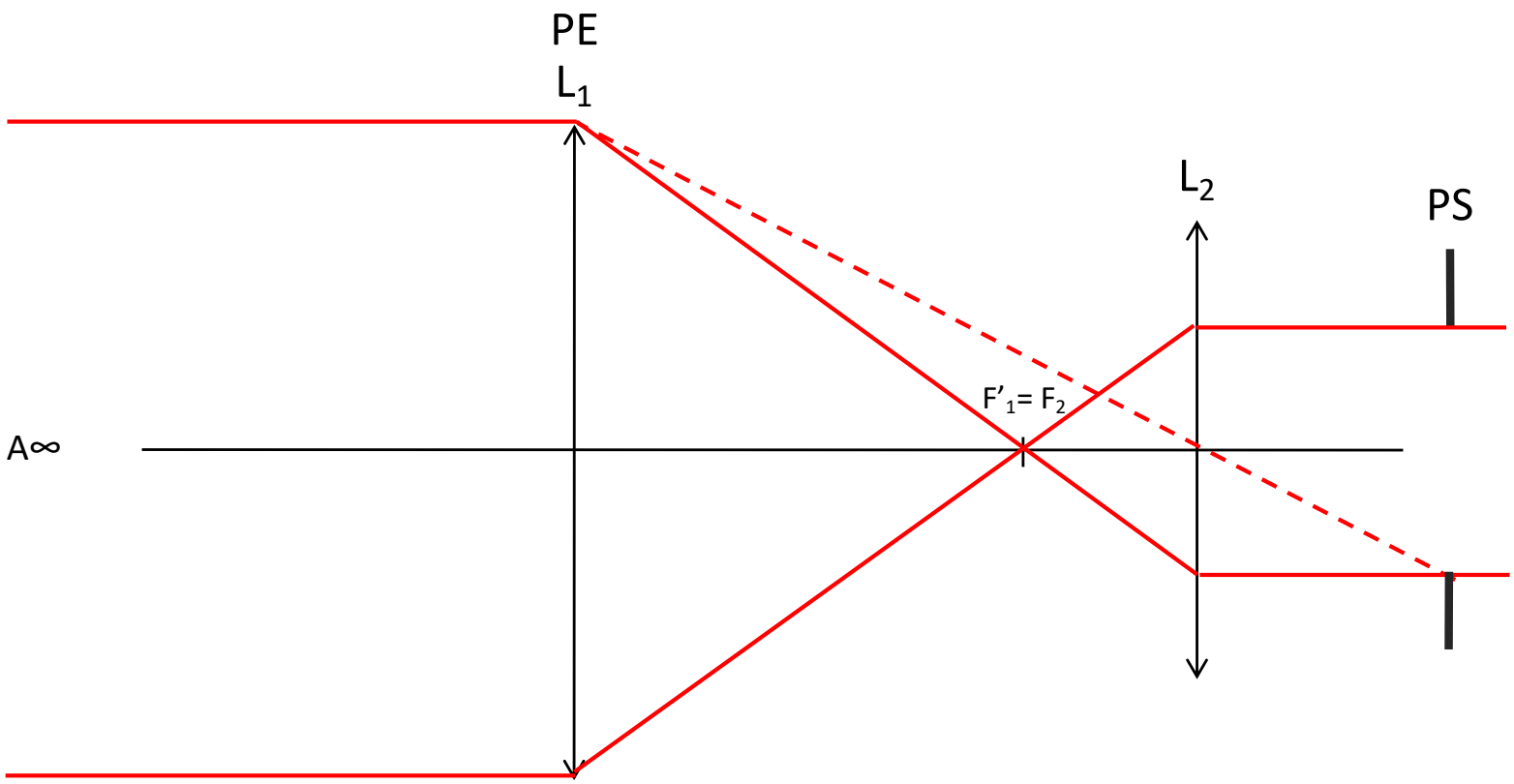


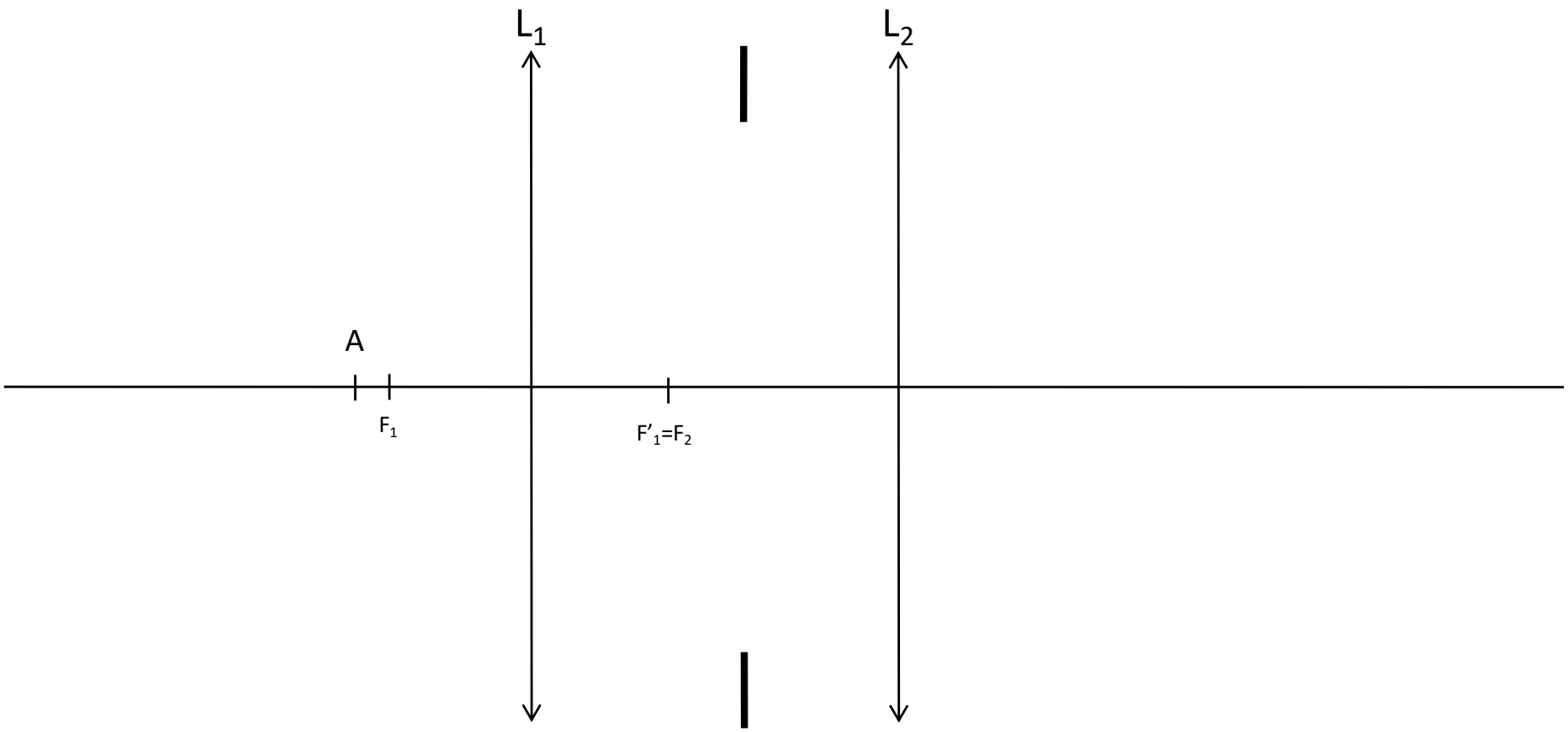
tracés pupilles #4



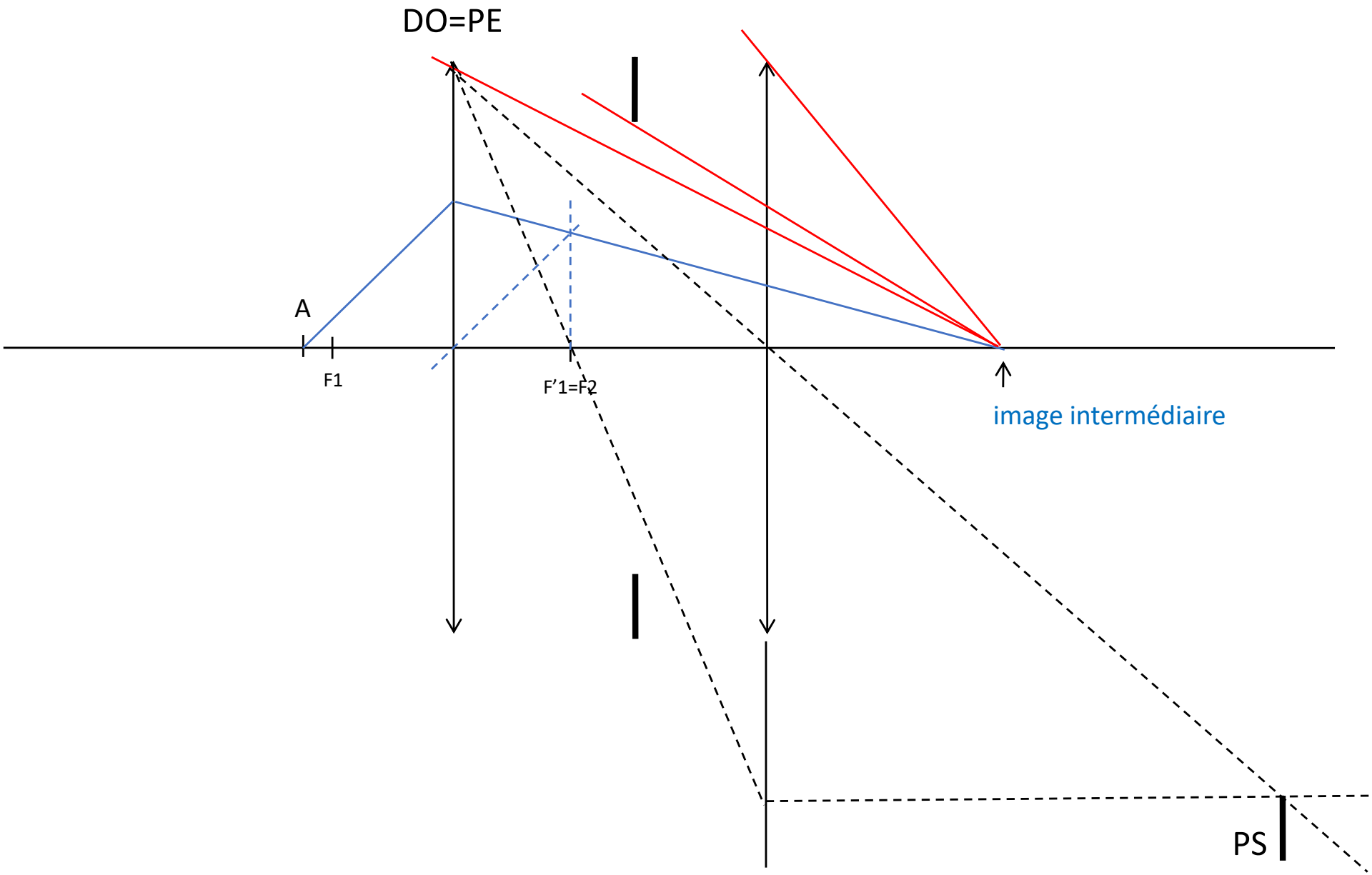
tracés pupilles #4



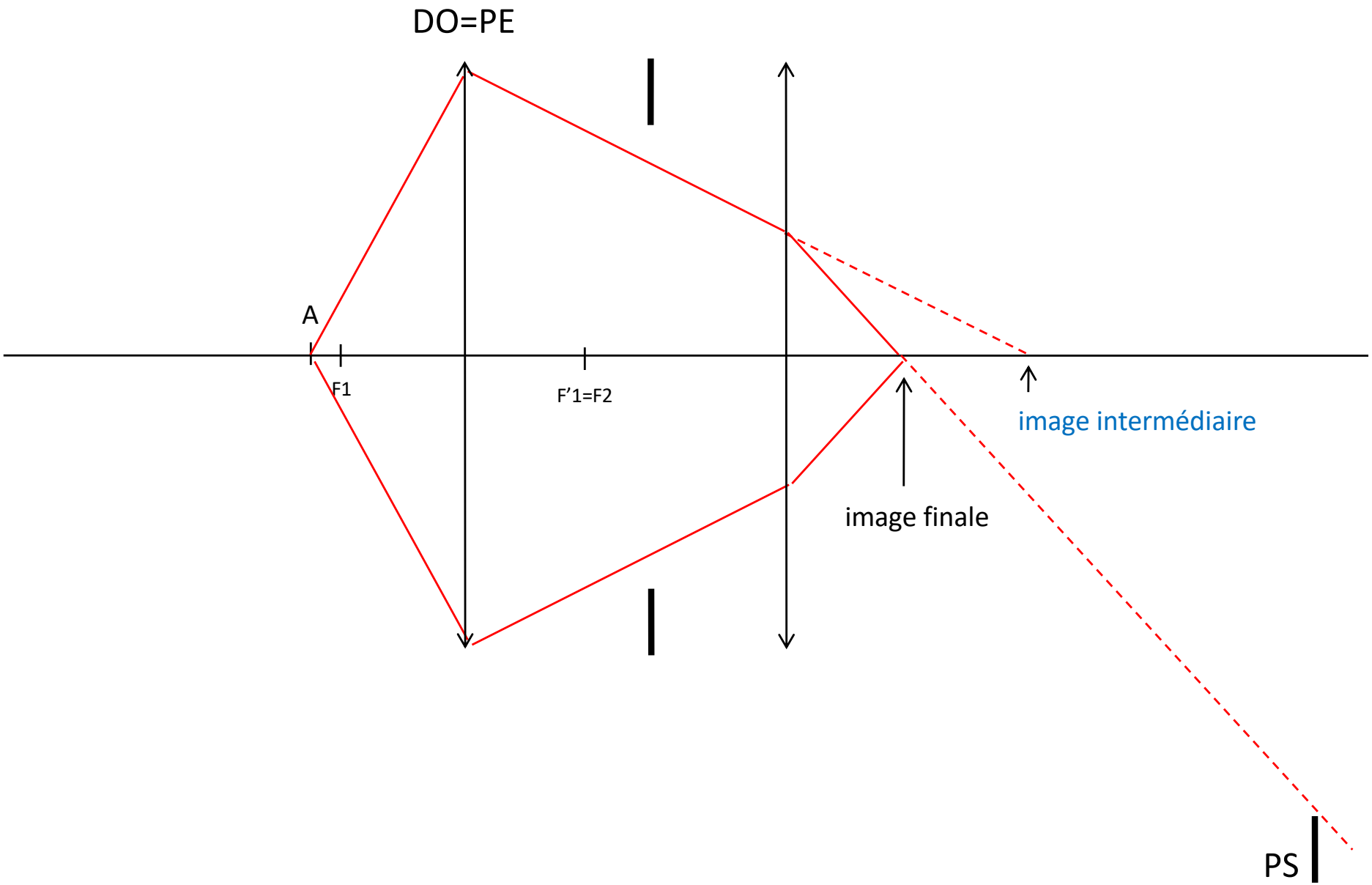
tracés pupilles #5



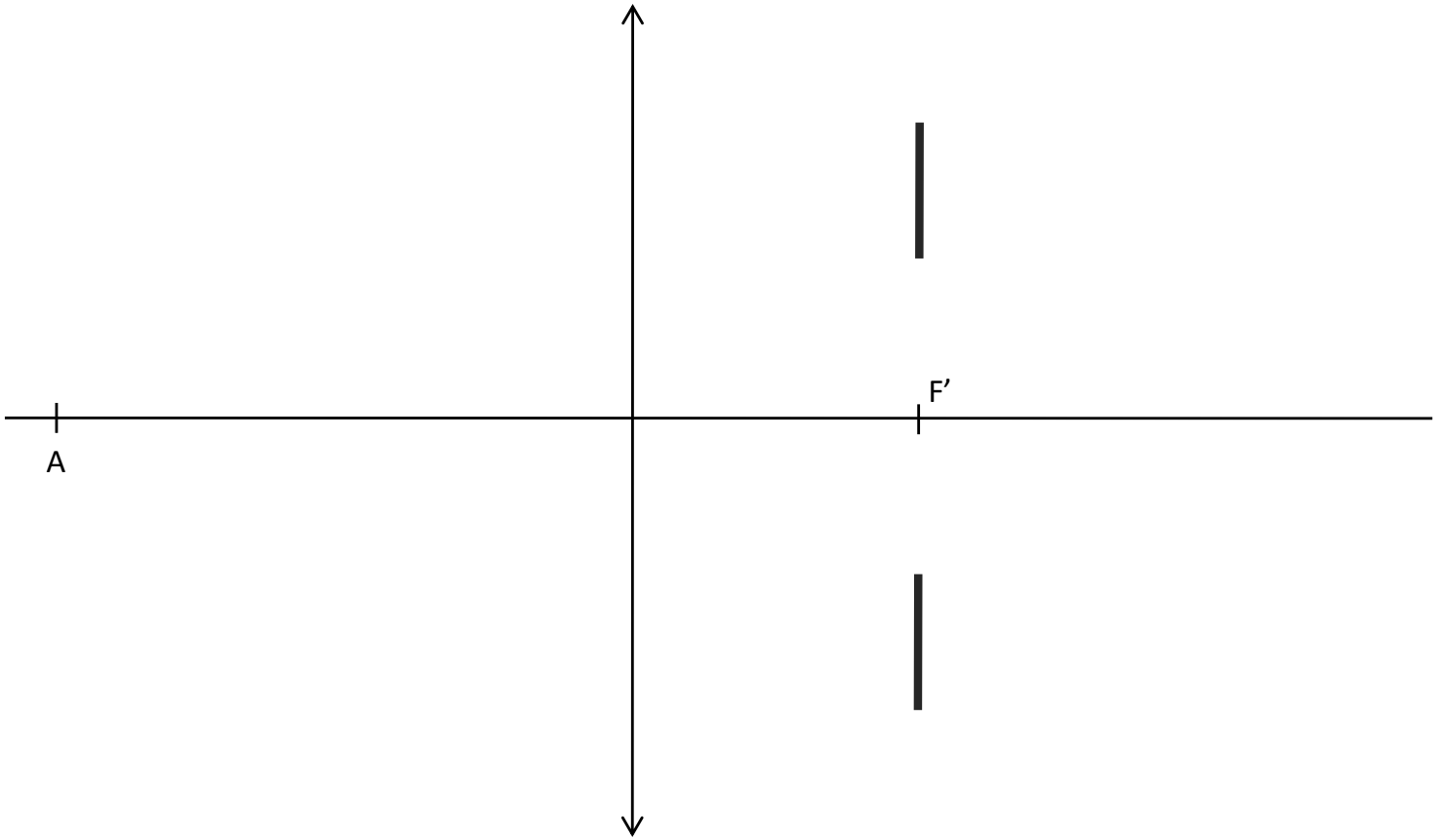
tracés pupilles #5

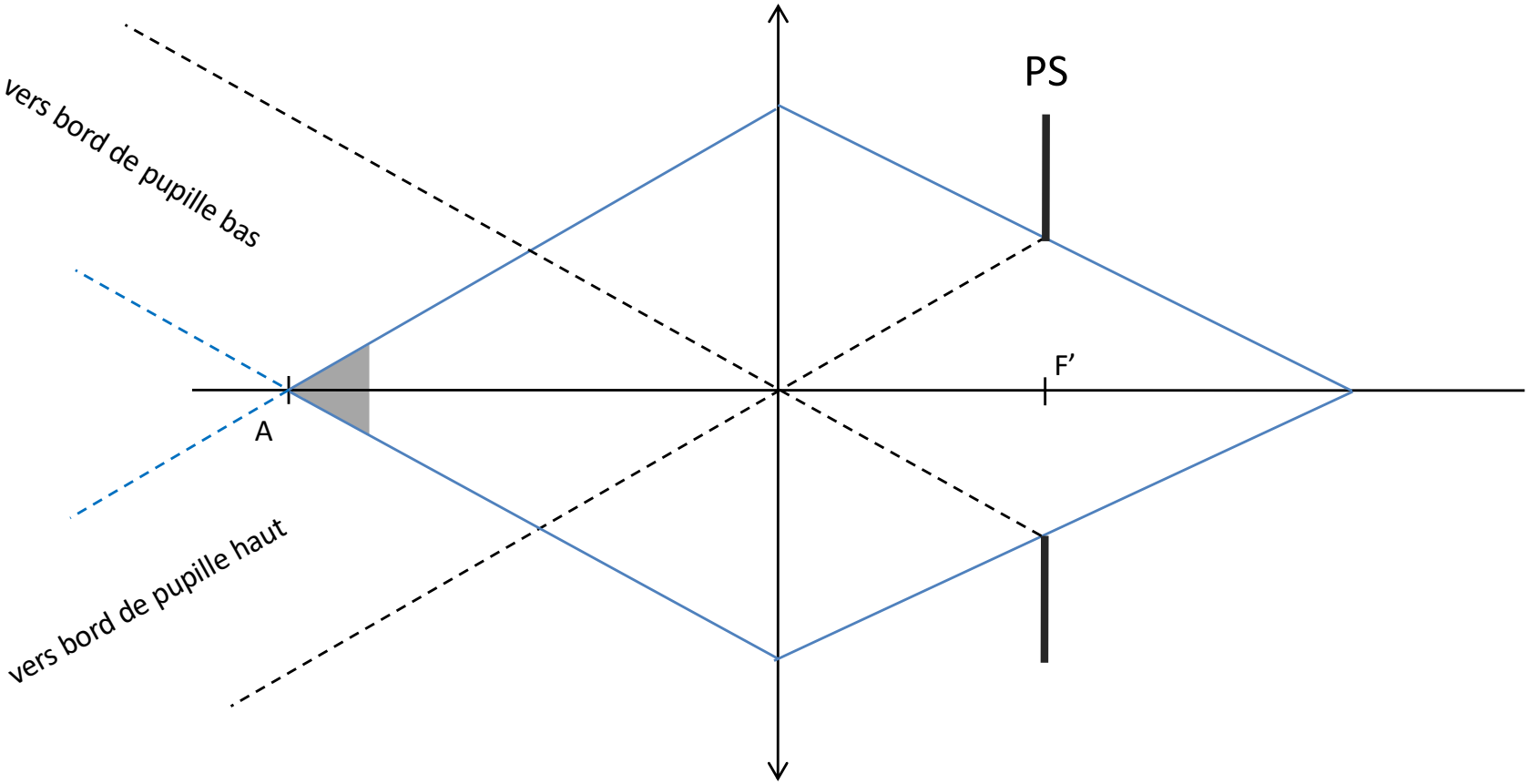


tracés pupilles #5



tracés pupilles #6

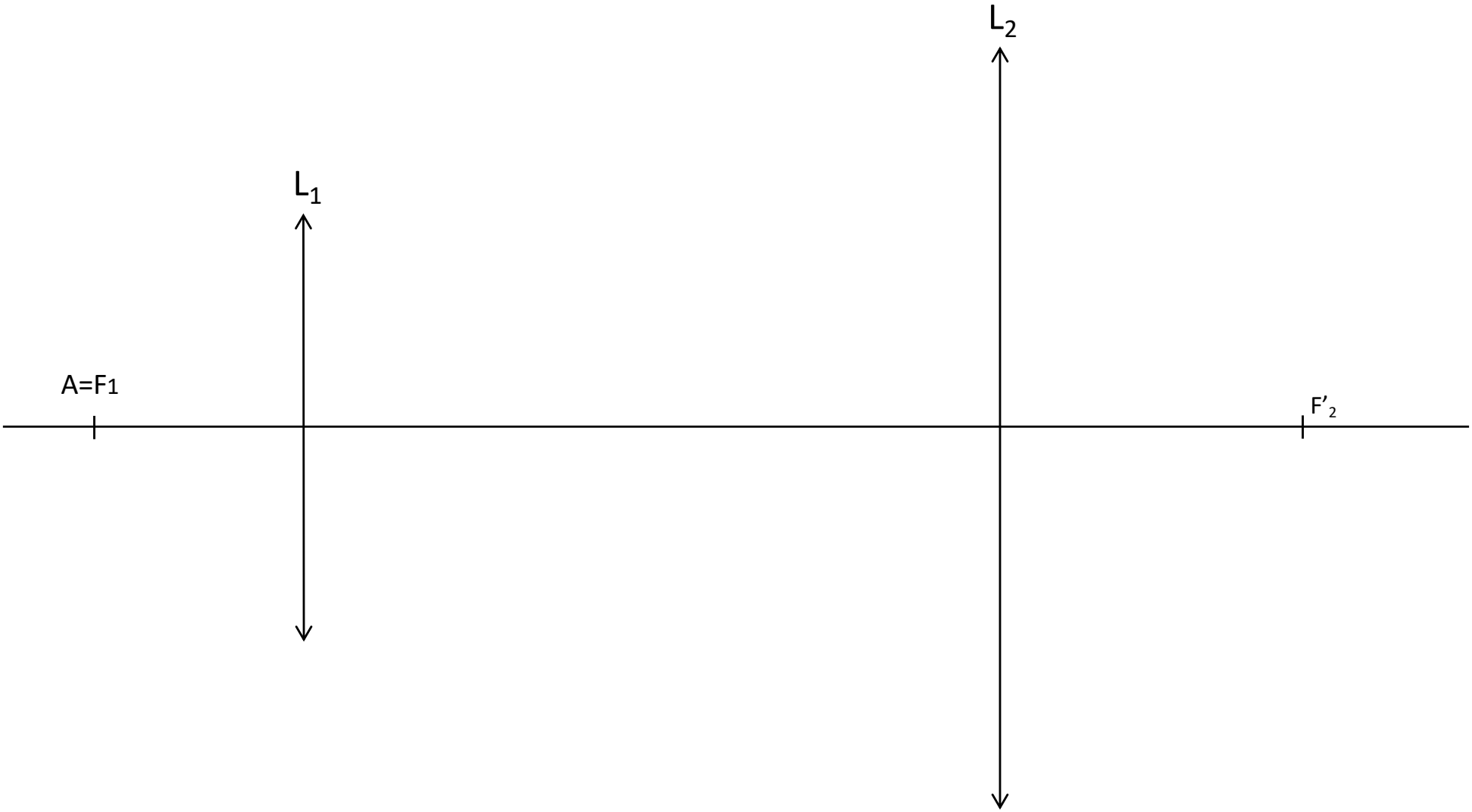




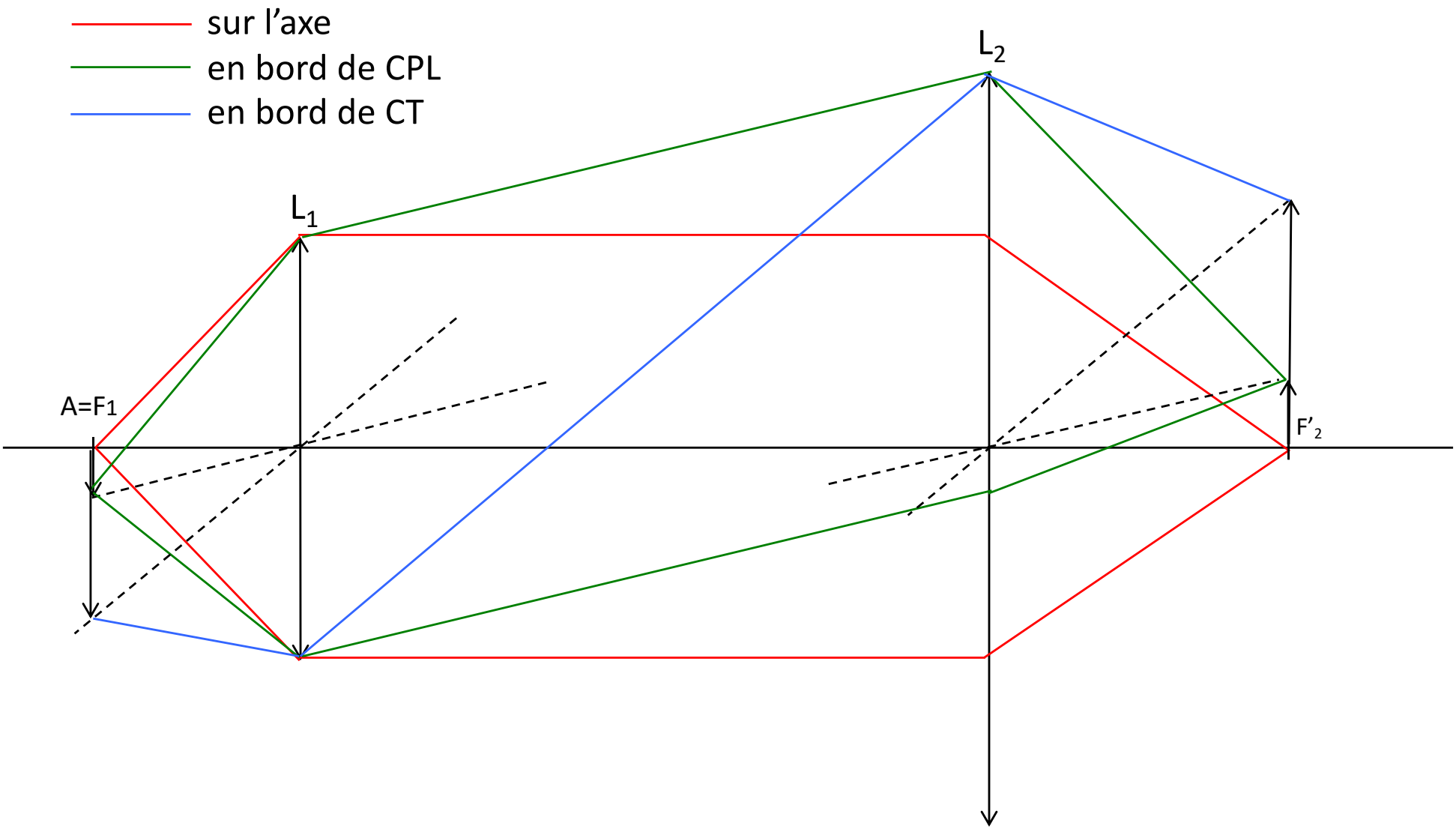
PE à l'infini

système télécentrique objet

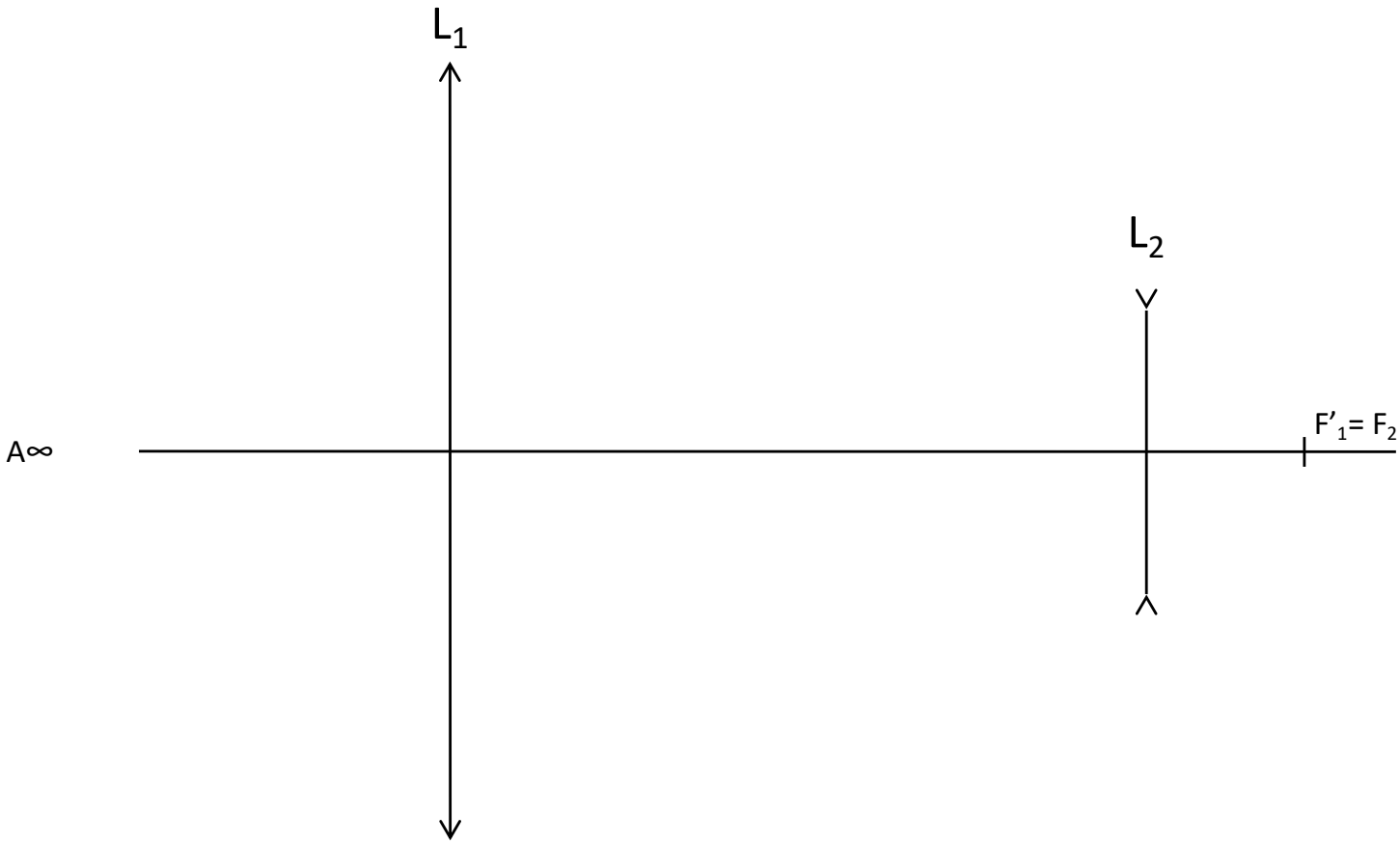
tracés pupilles & champs #7



tracés pupilles & champs #7



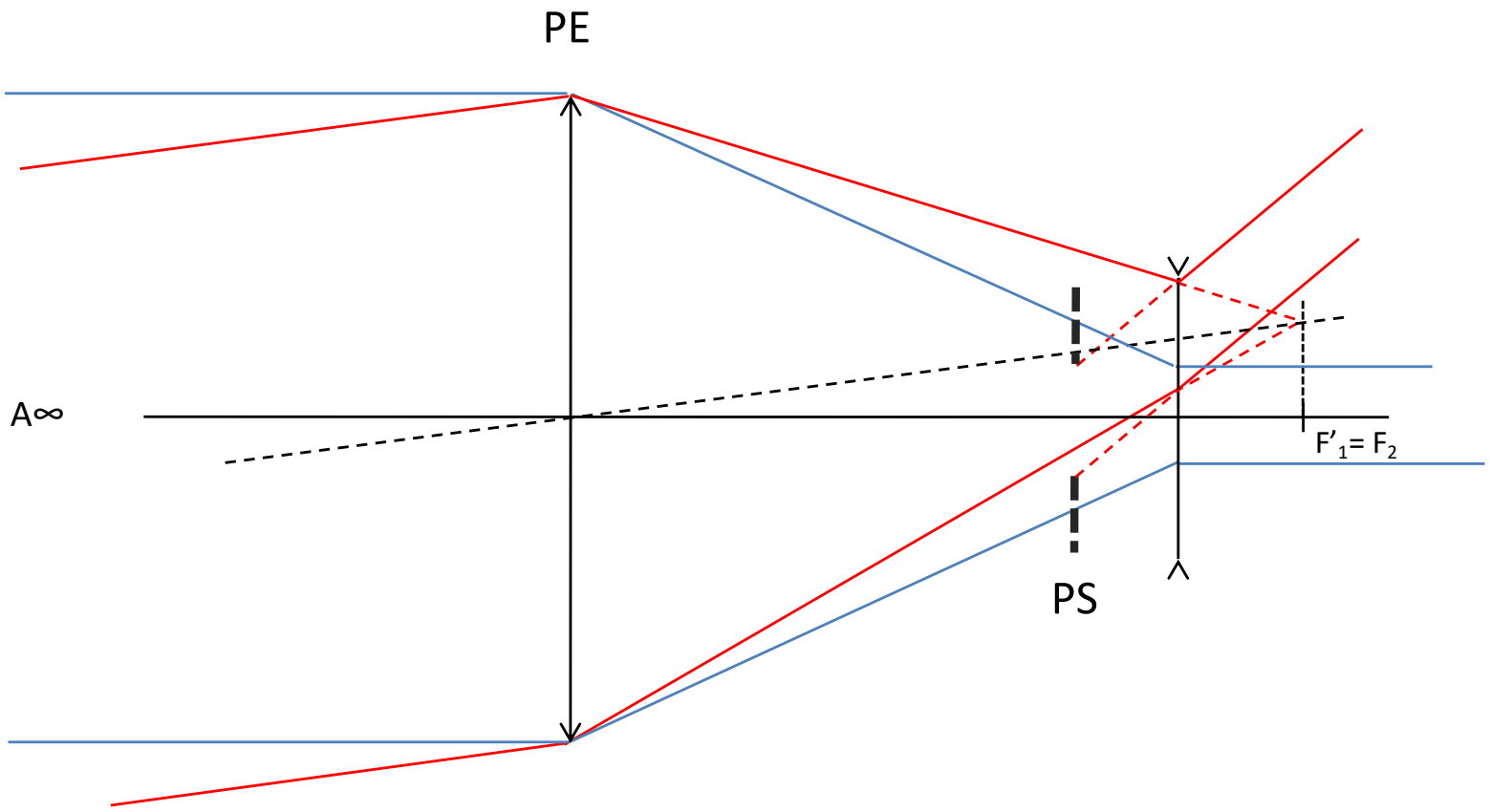
tracés pupilles & champs #8



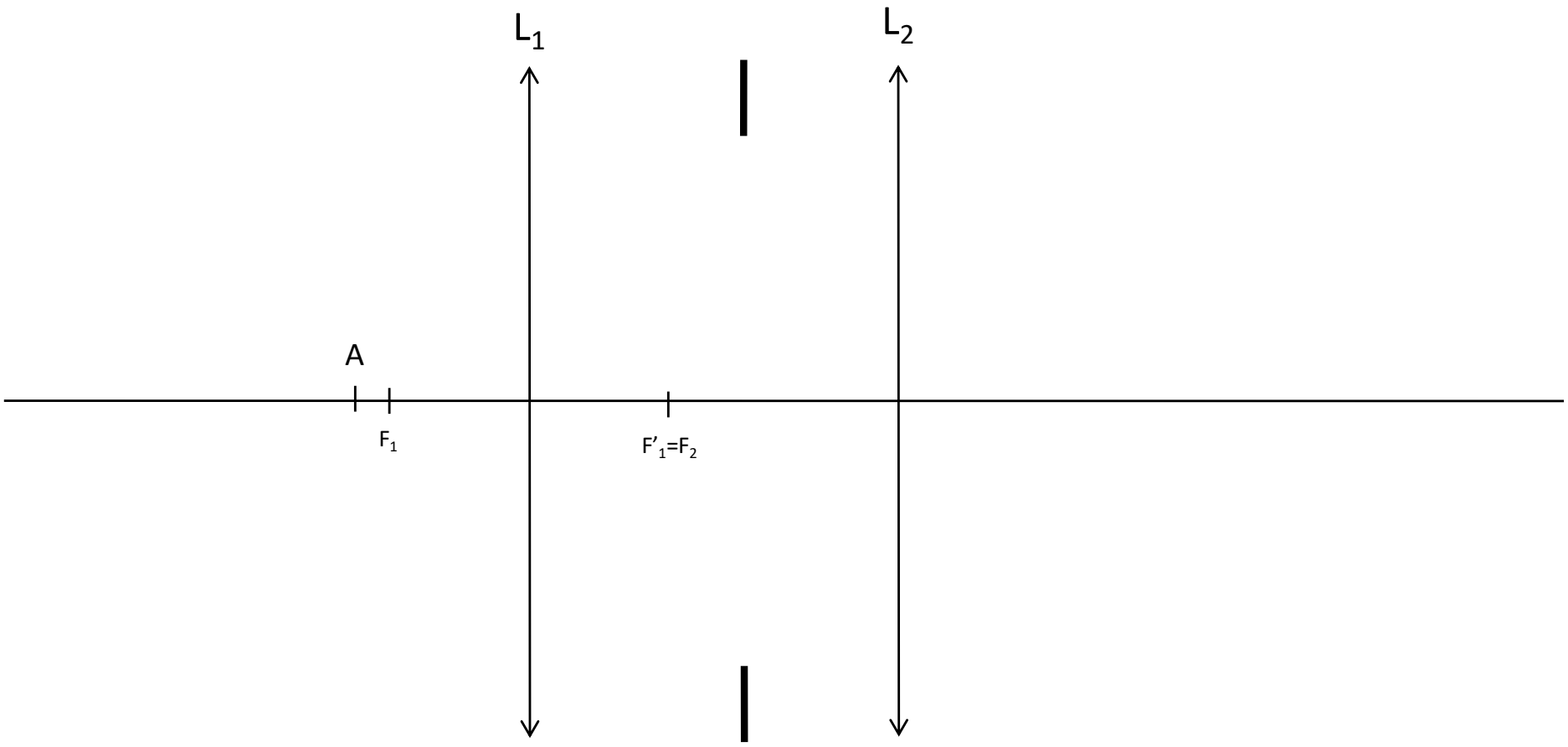
tracés pupilles & champs #8

sur l'axe

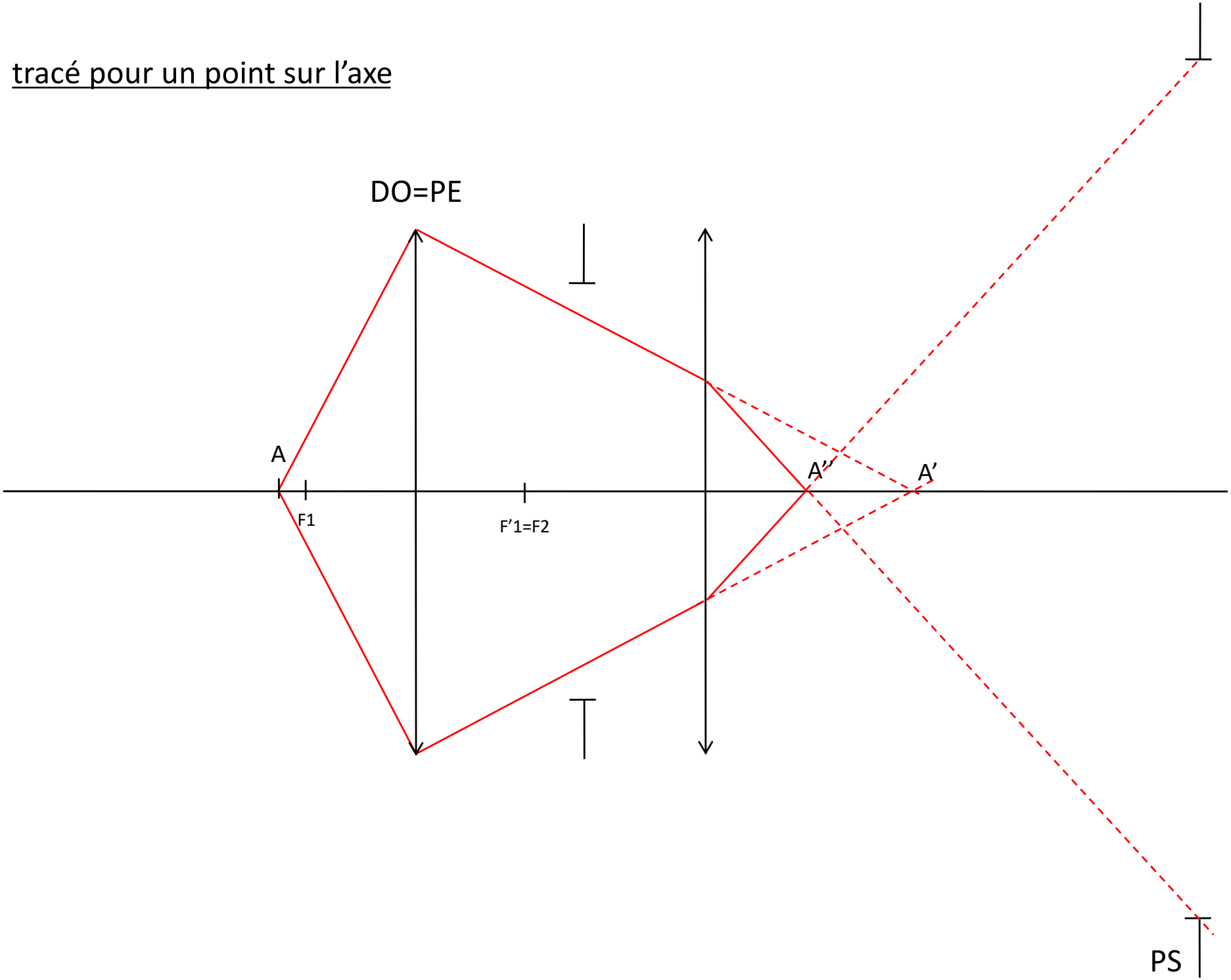
en bord de CPL



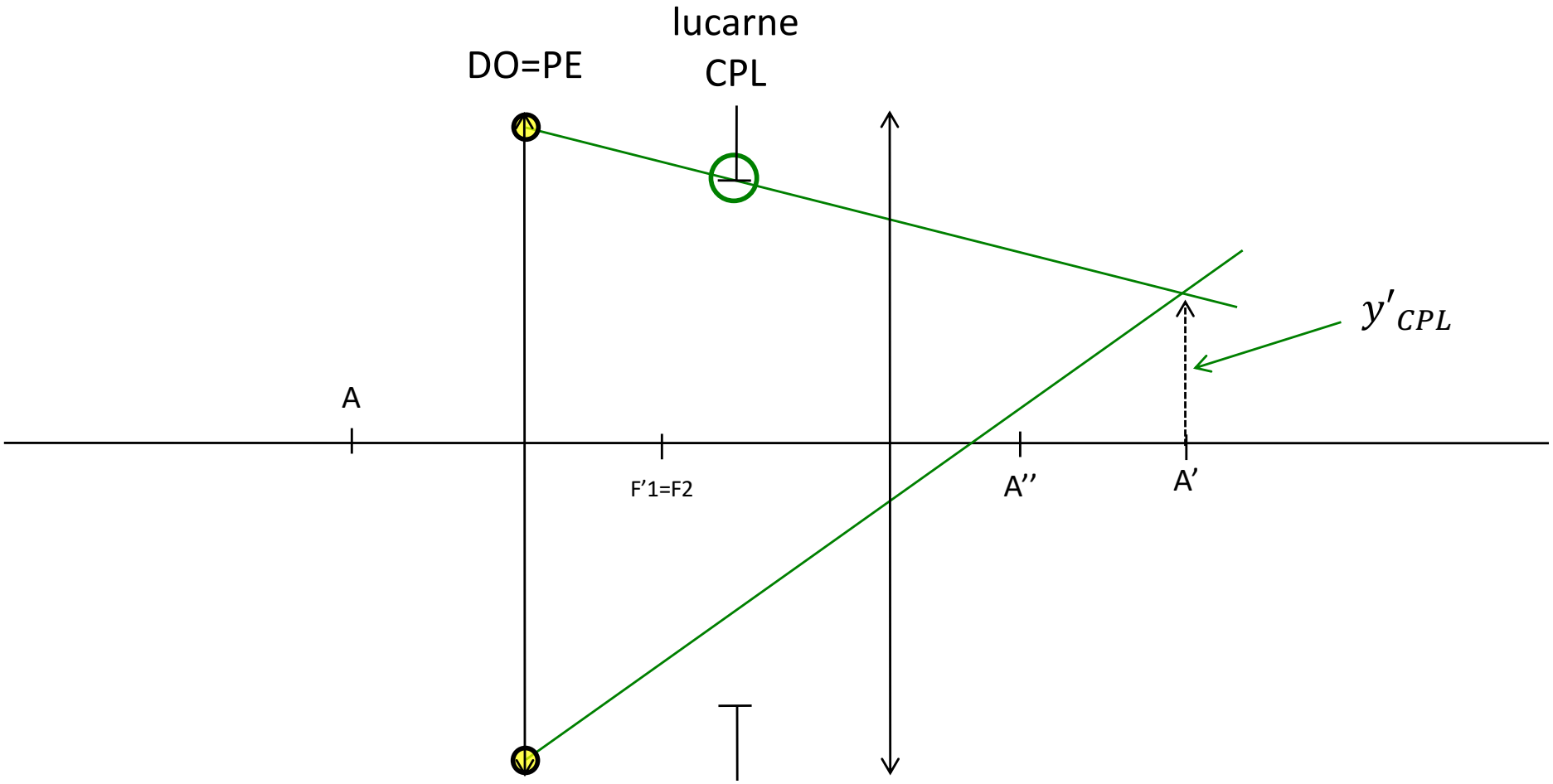
tracés pupilles & champs #9



tracé pour un point sur l'axe

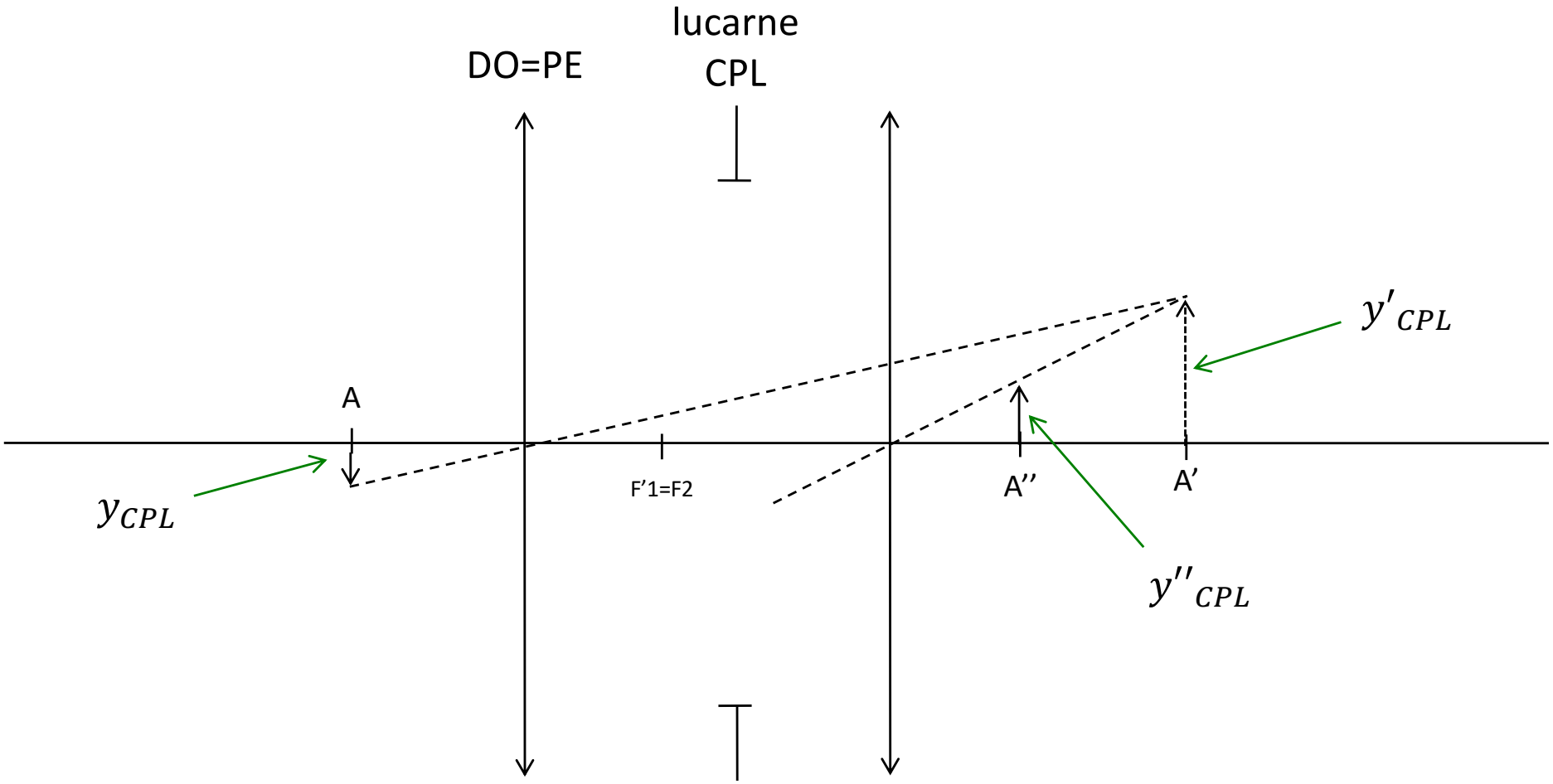


détermination du bord du CPL dans l'espace intermédiaire



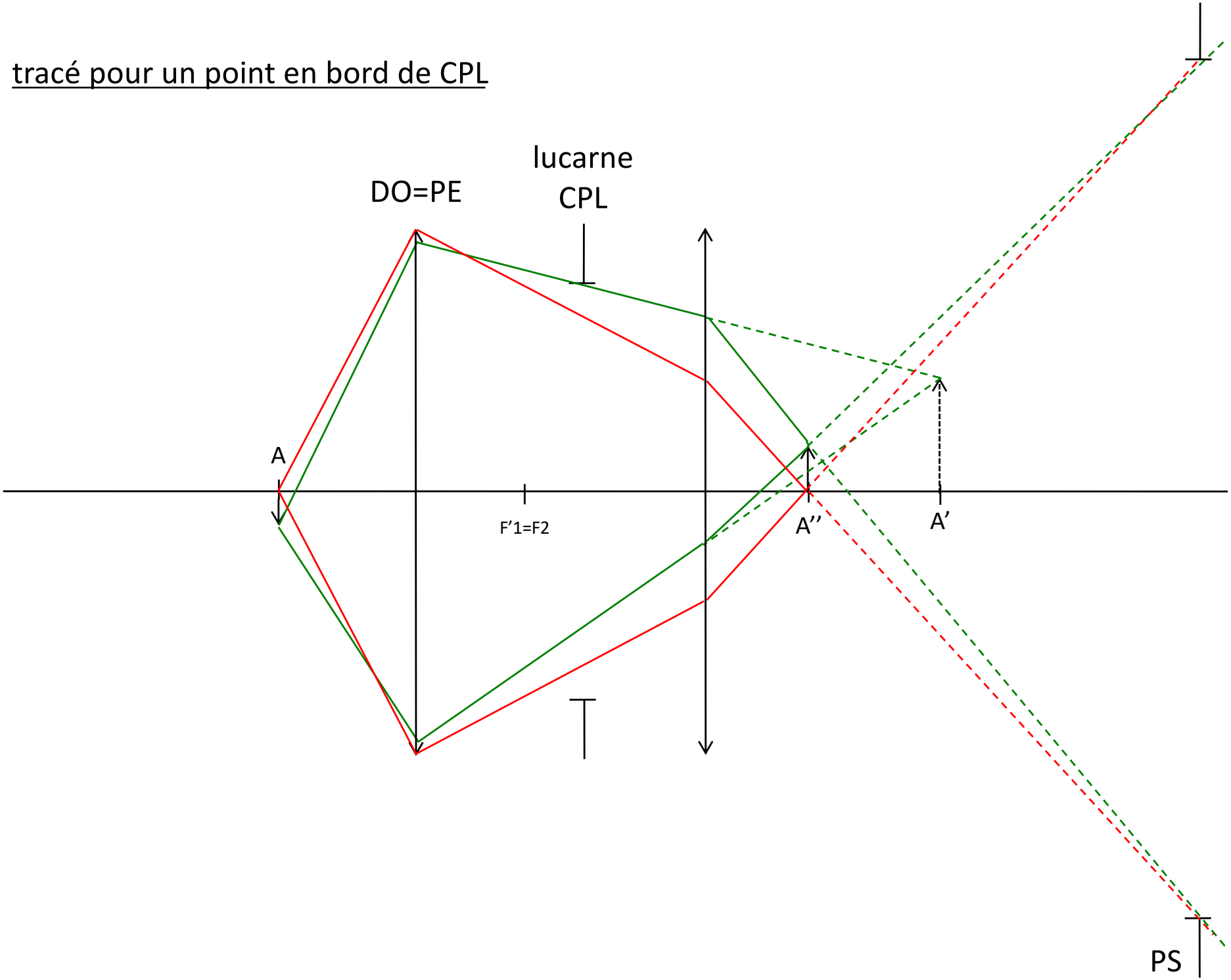
PS

détermination du bord du CPL dans l'espace entrée et sortie

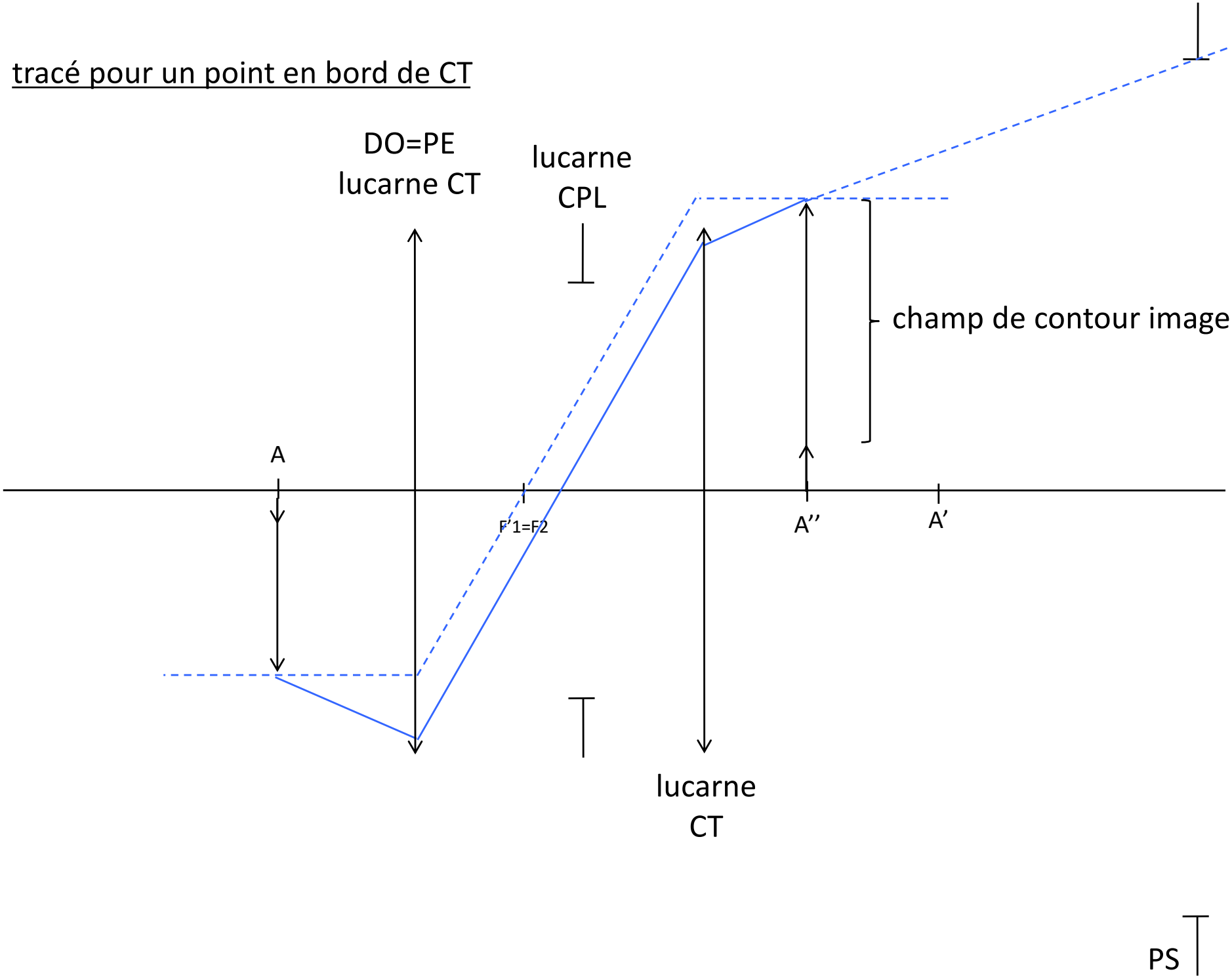


PS

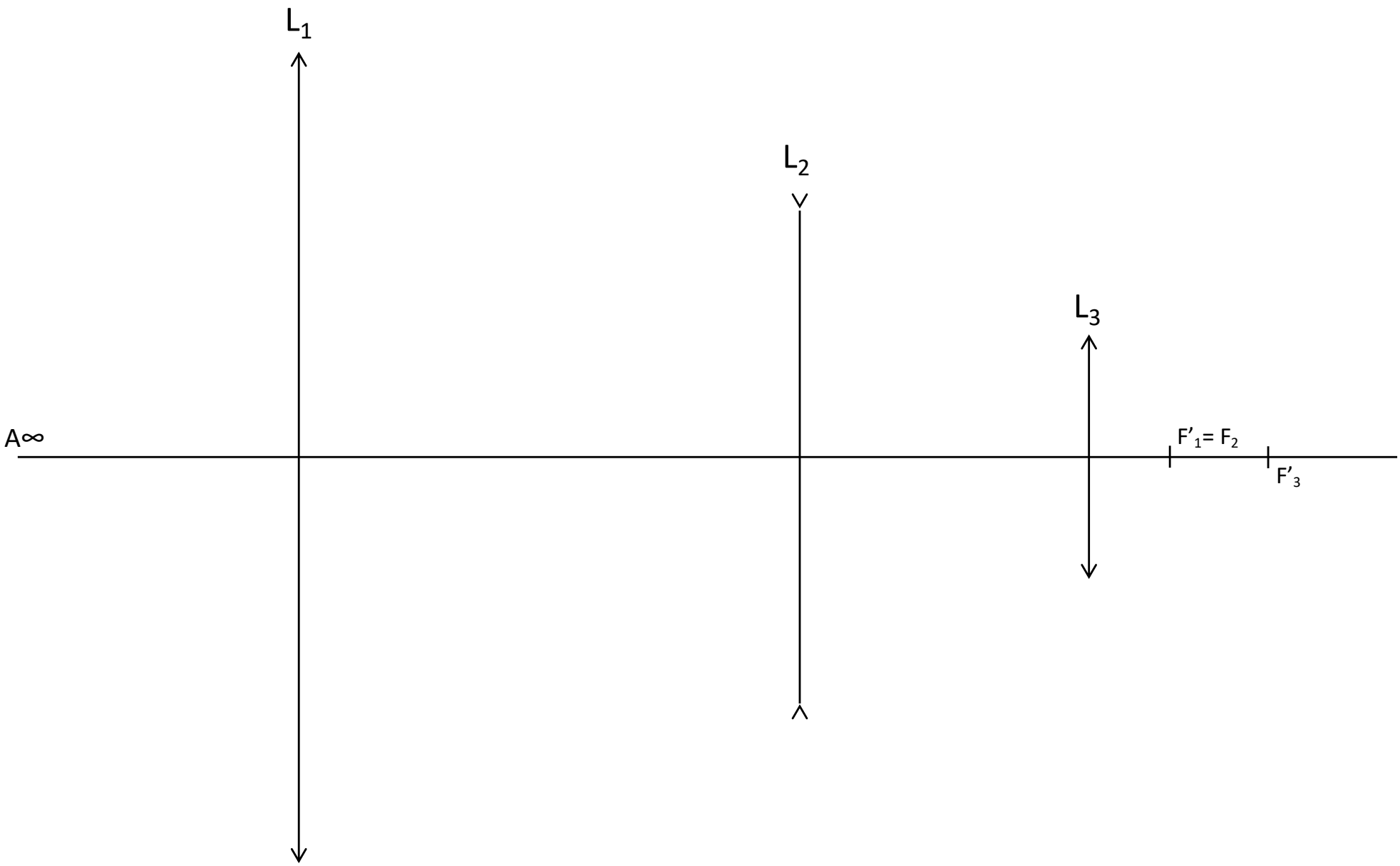
tracé pour un point en bord de CPL



tracé pour un point en bord de CT



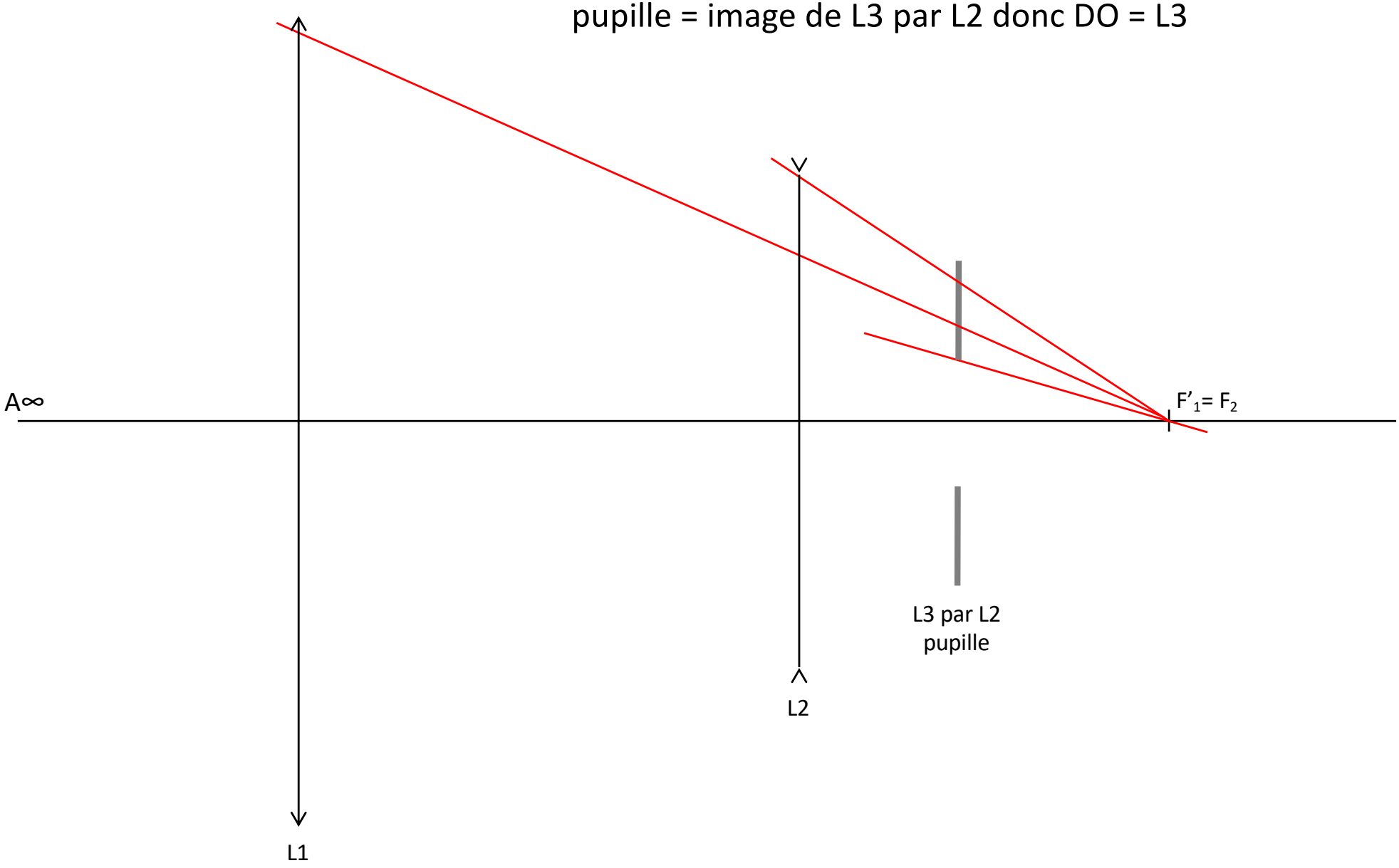
tracés pupilles & champs #10



<u>espace intermédiaire L1-L2</u>

on regarde de F'_1 l'angle de vue de chaque élément

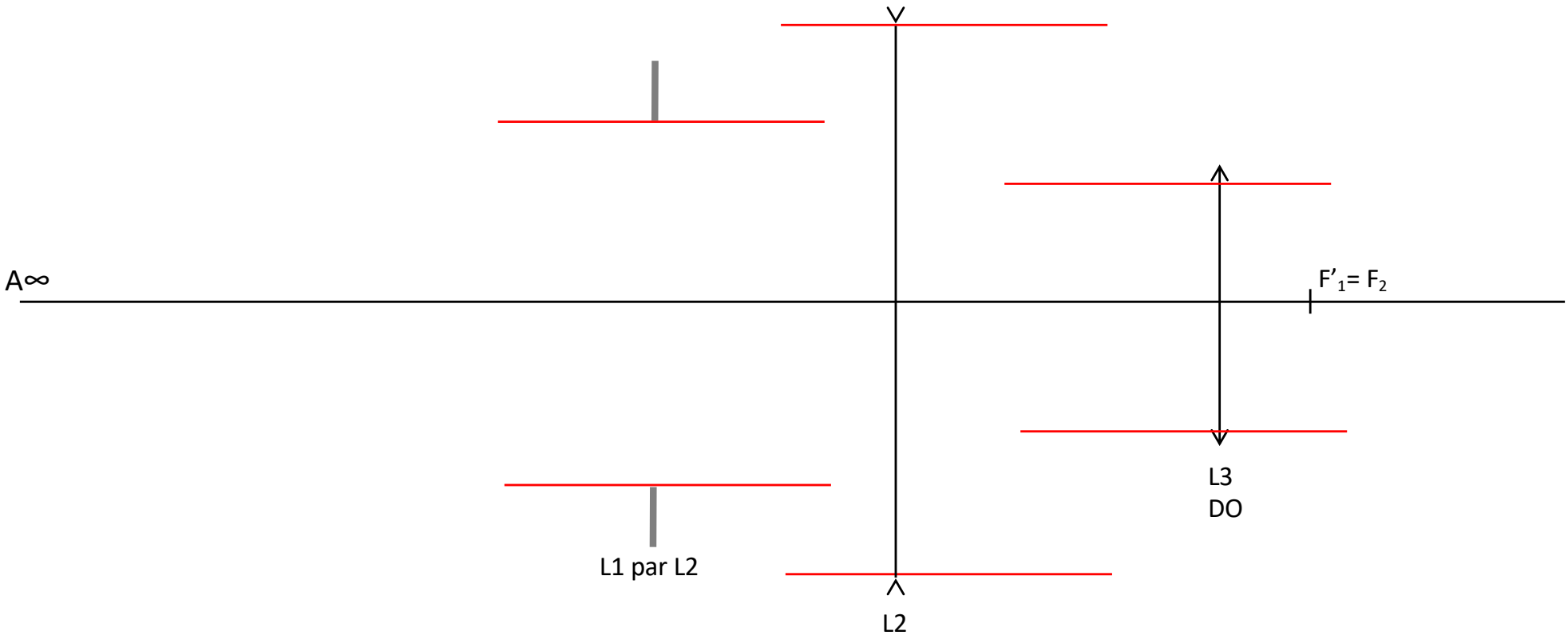
pupille = image de L3 par L2 donc DO = L3



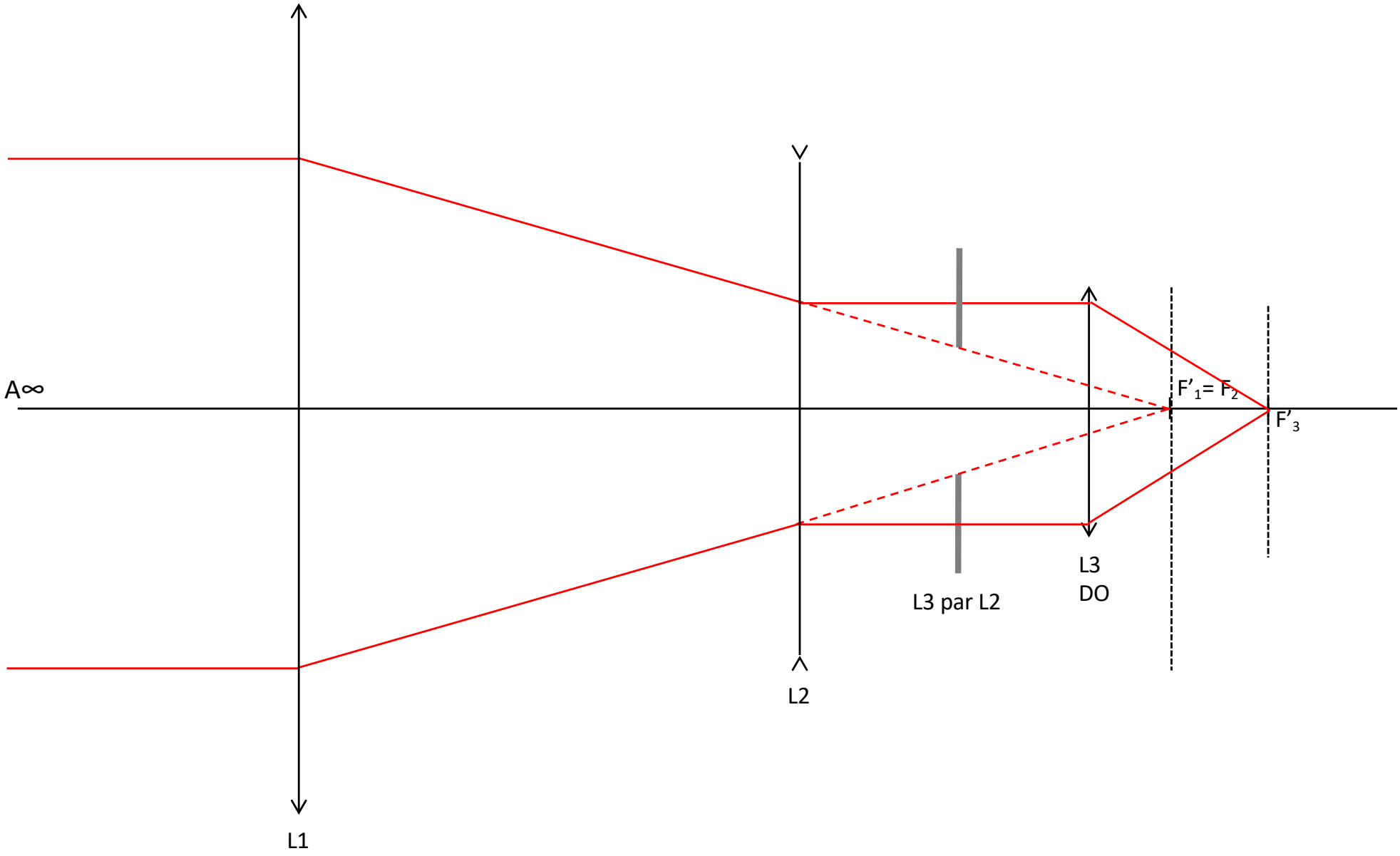
<u>espace intermédiaire L2-L3</u>

image à l'infini donc on compare les diamètres des éléments

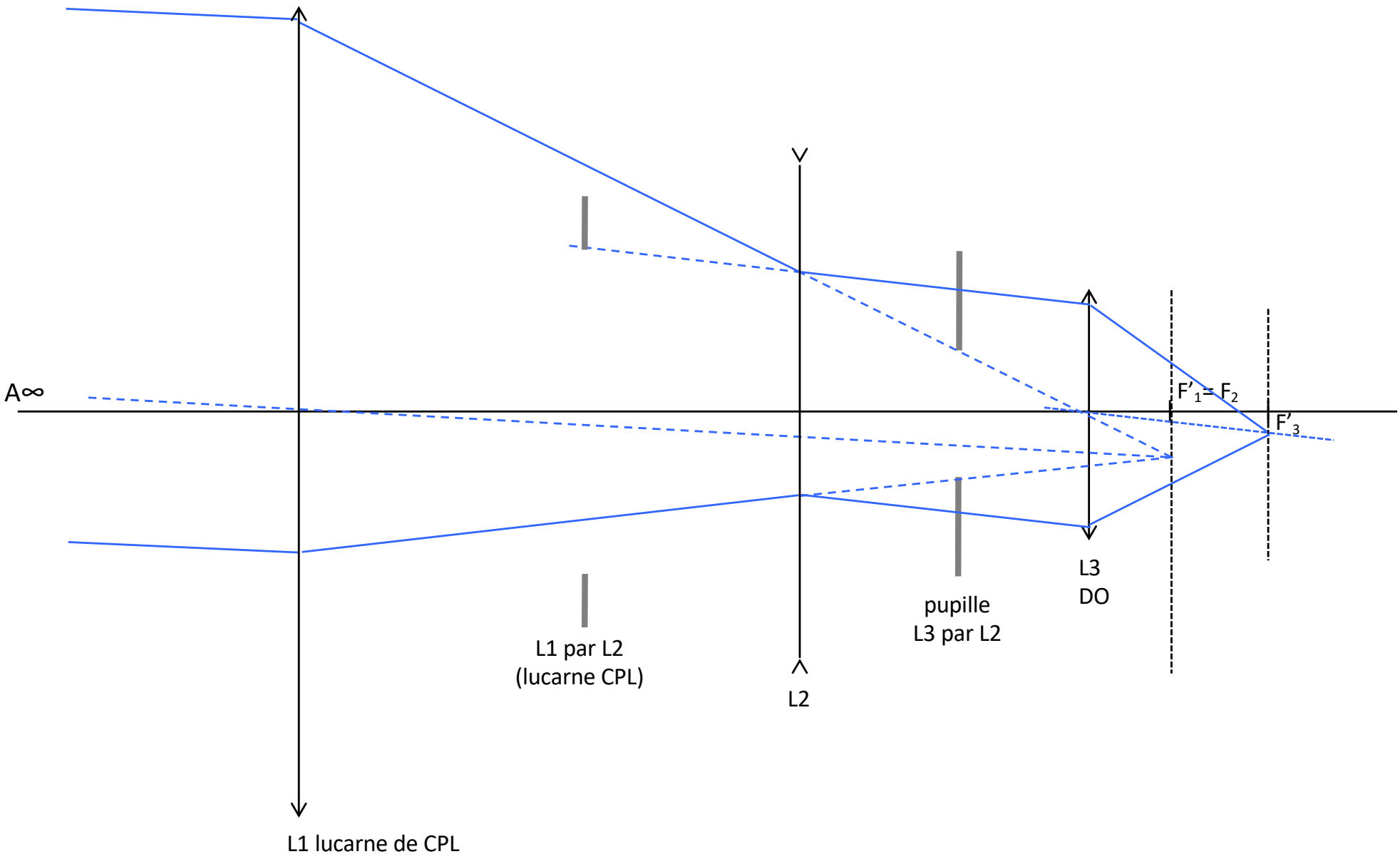
pupille = L3 donc DO = L3



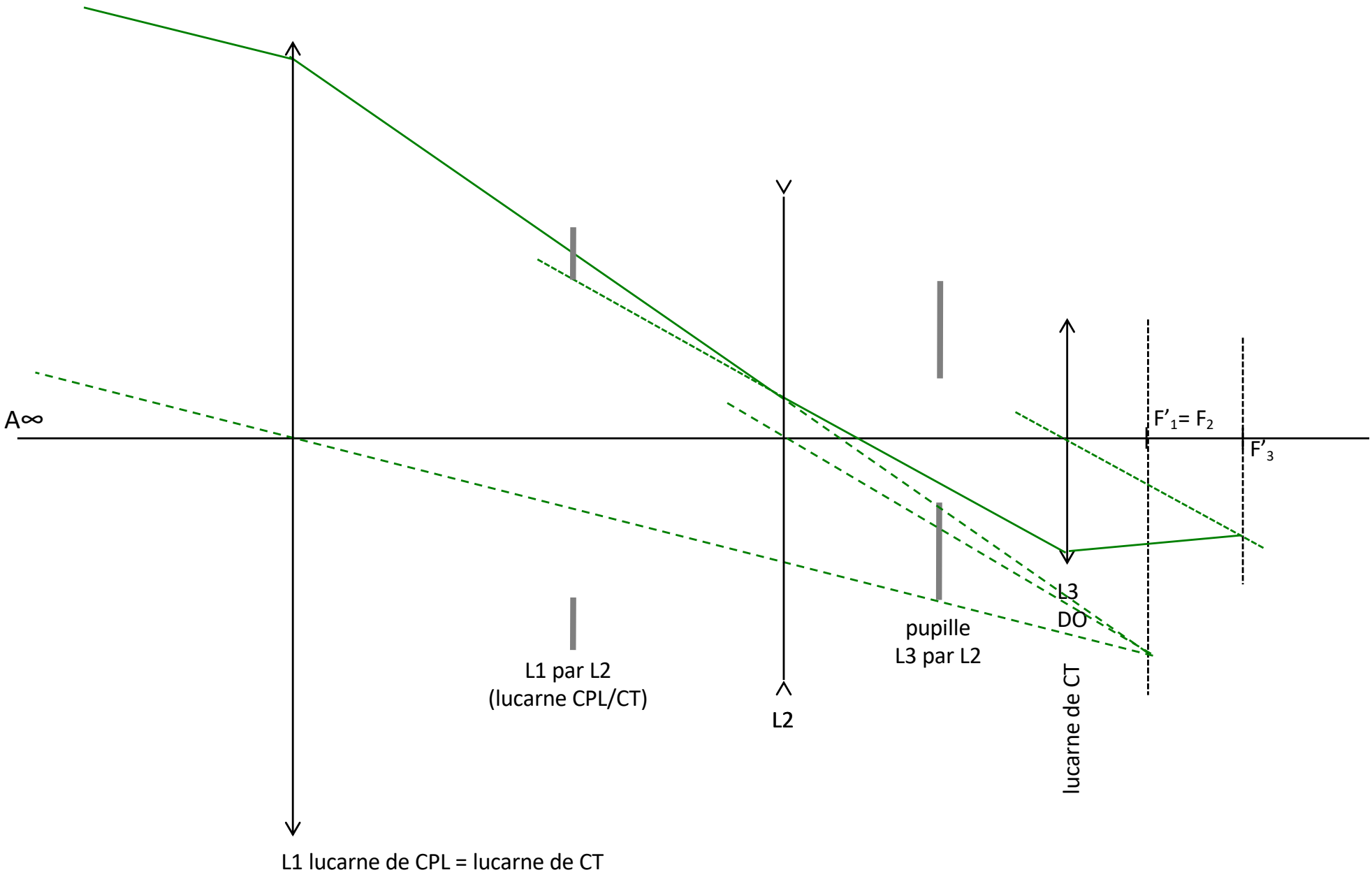
tracé sur l'axe



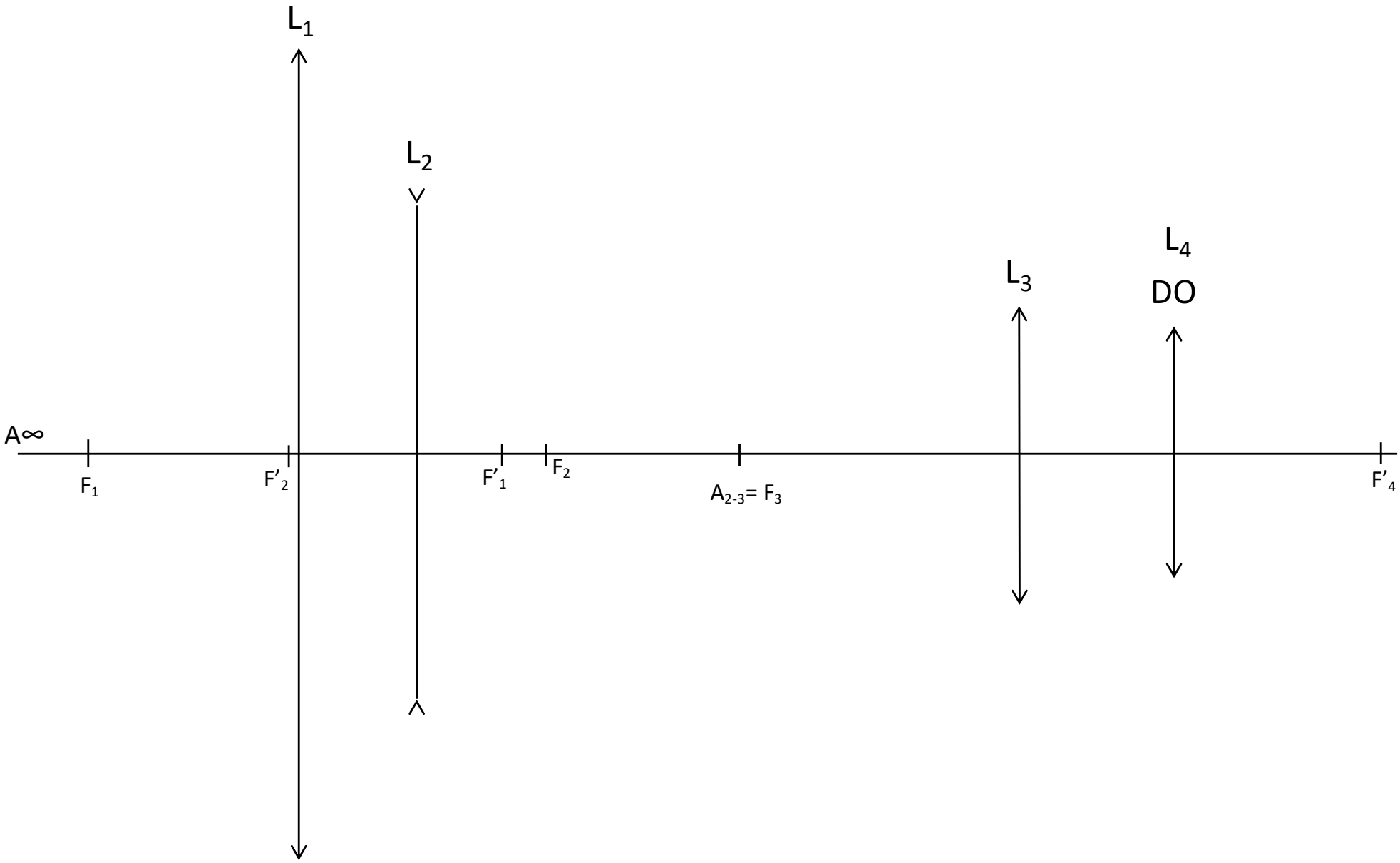
tracé en bord de CPL



tracé en bord de CT

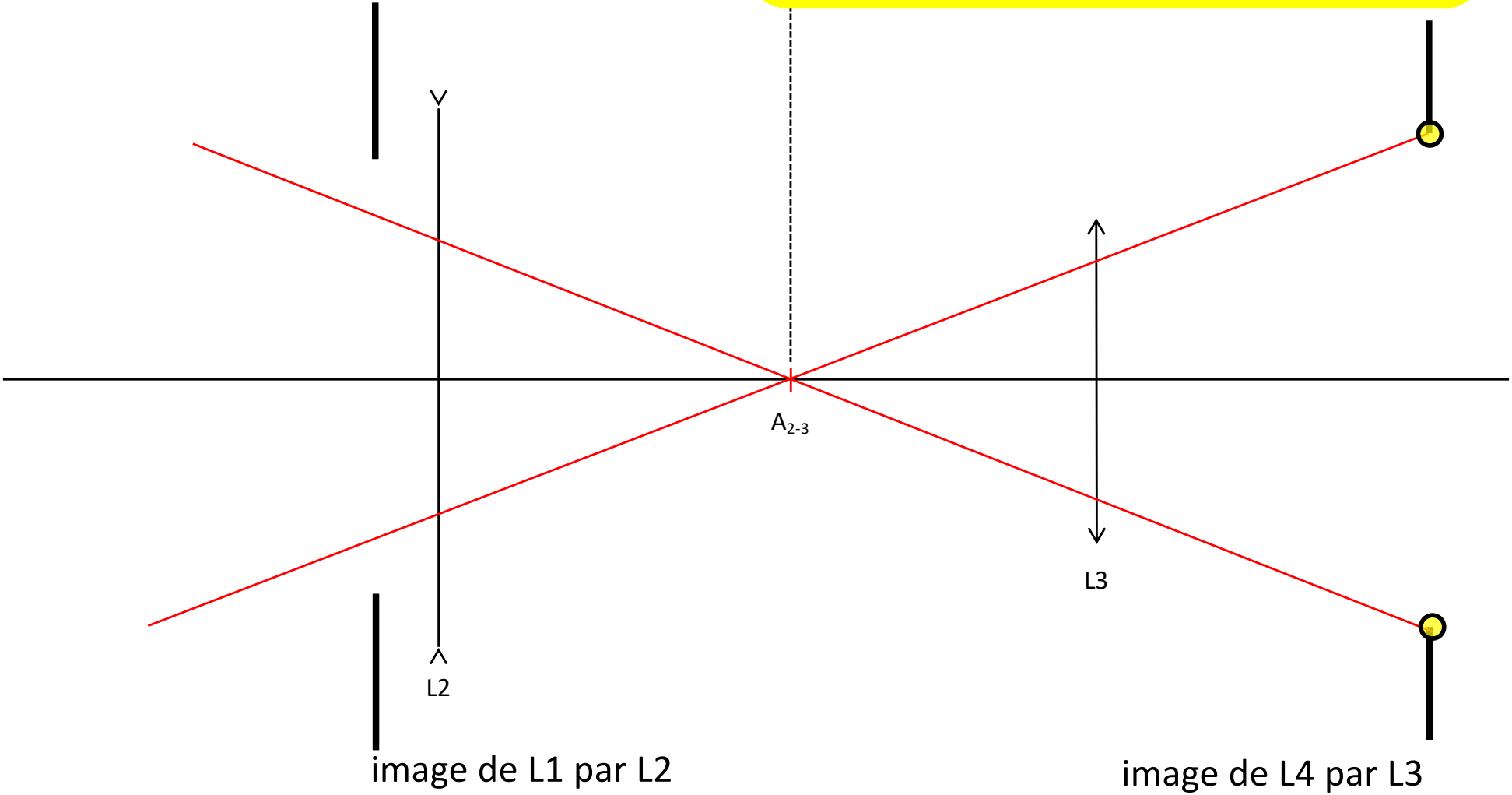


tracés pupilles & champs #11



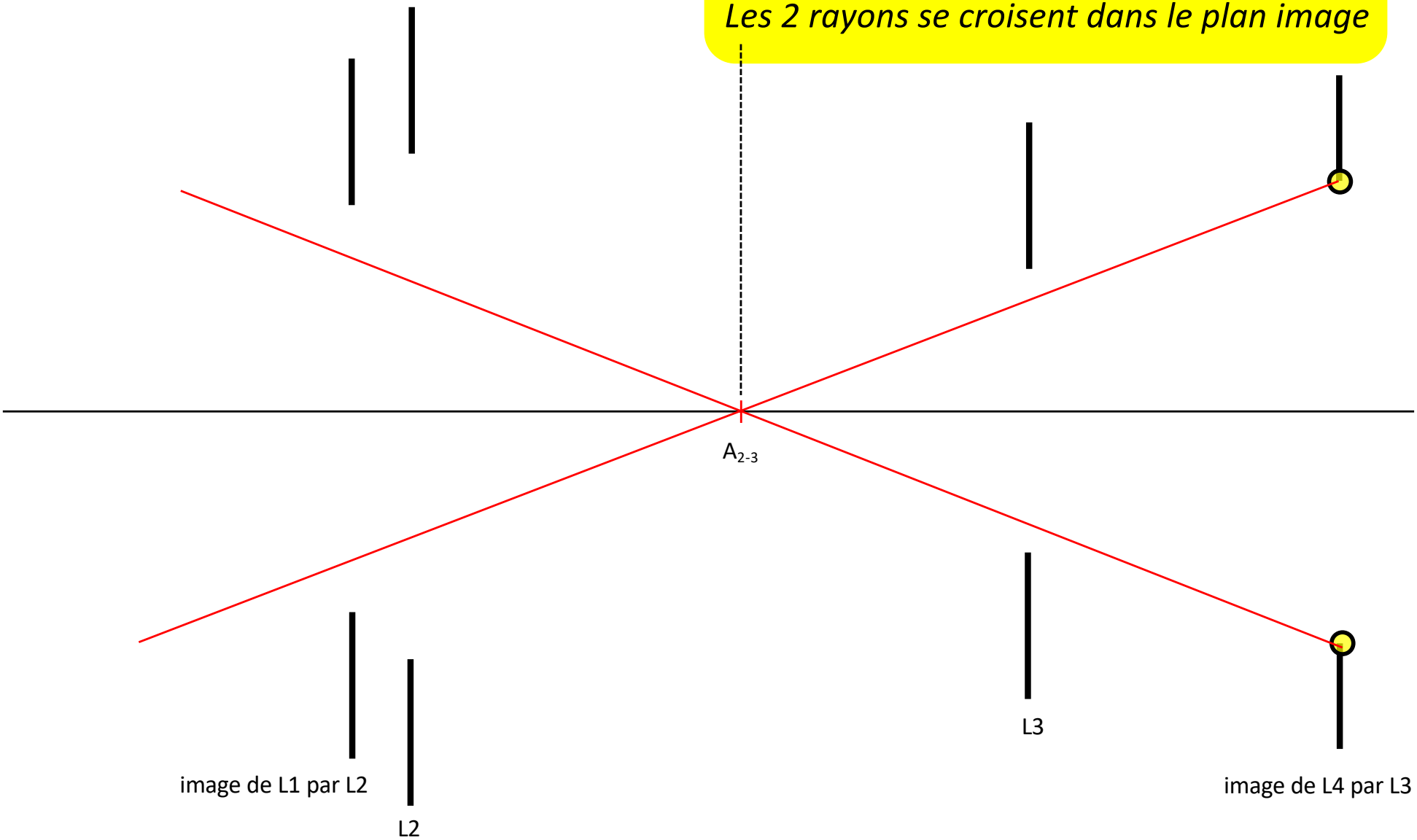
dans l'espace de $A_{2\text{-}3}$

On garde à l'esprit que :
La pupille est le pivot
Les 2 rayons se croisent dans le plan image



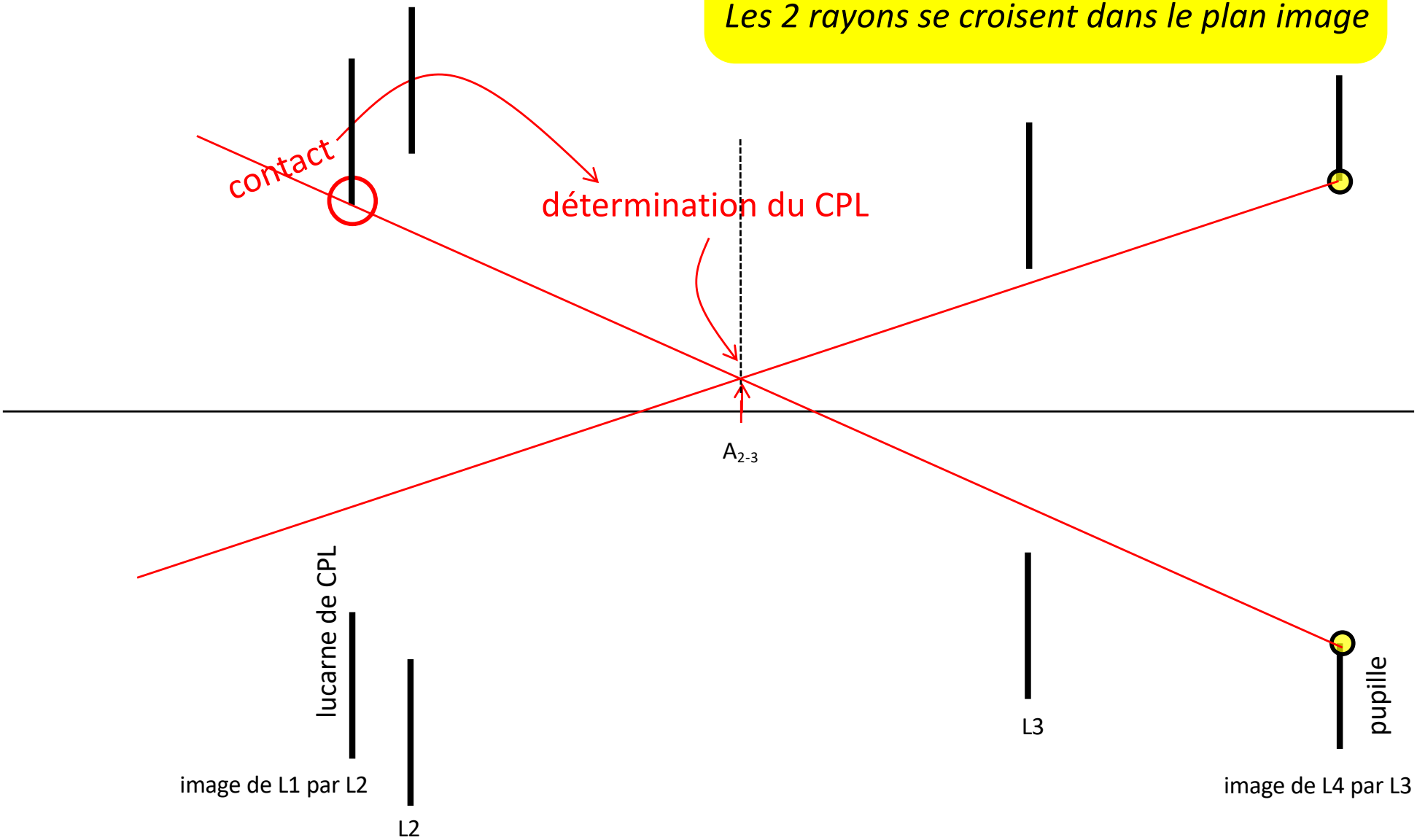
dans l'espace de $A_{2\text{-}3}$

On garde à l'esprit que :
La pupille est le pivot
Les 2 rayons se croisent dans le plan image

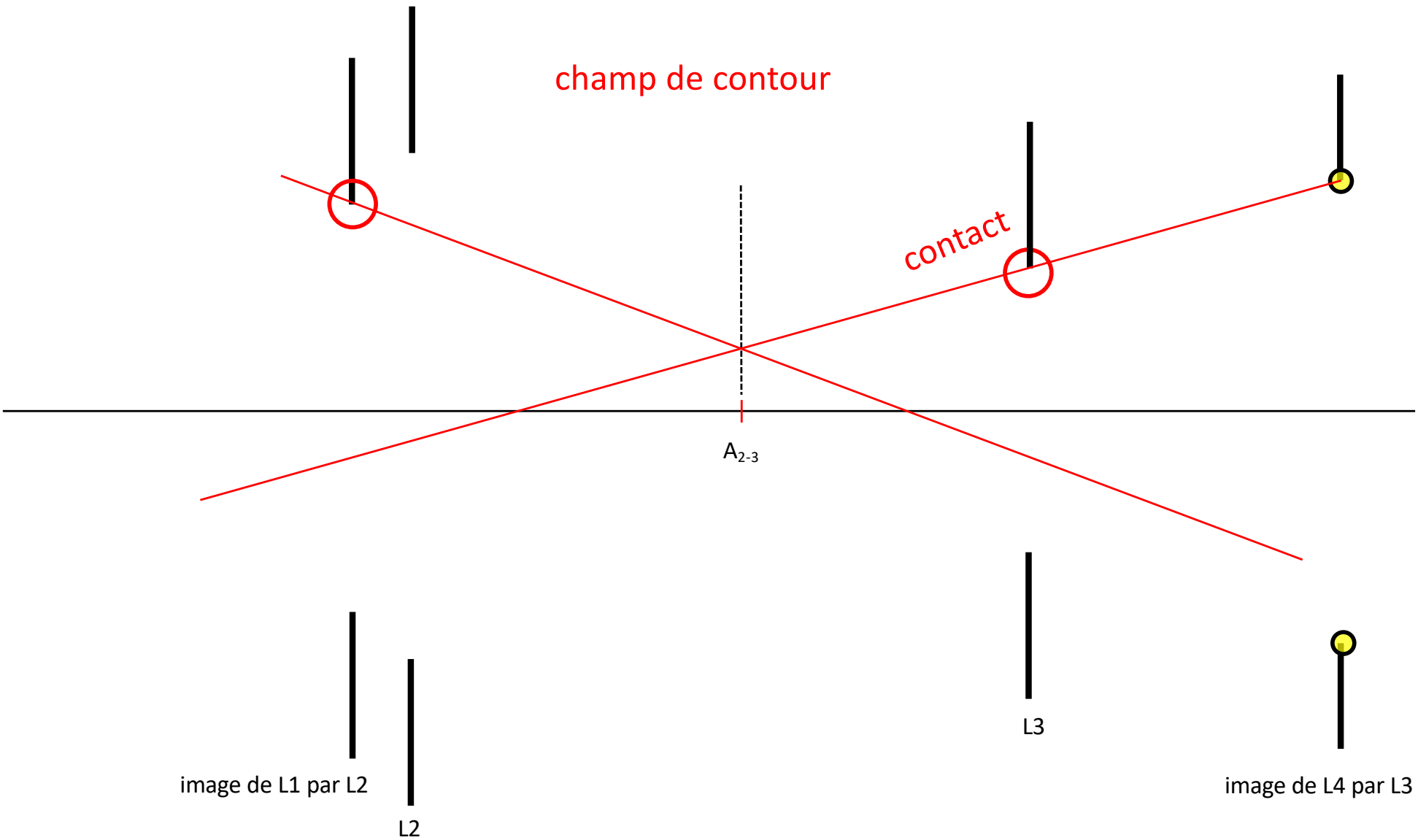


dans l'espace de $A_{2\text{-}3}$

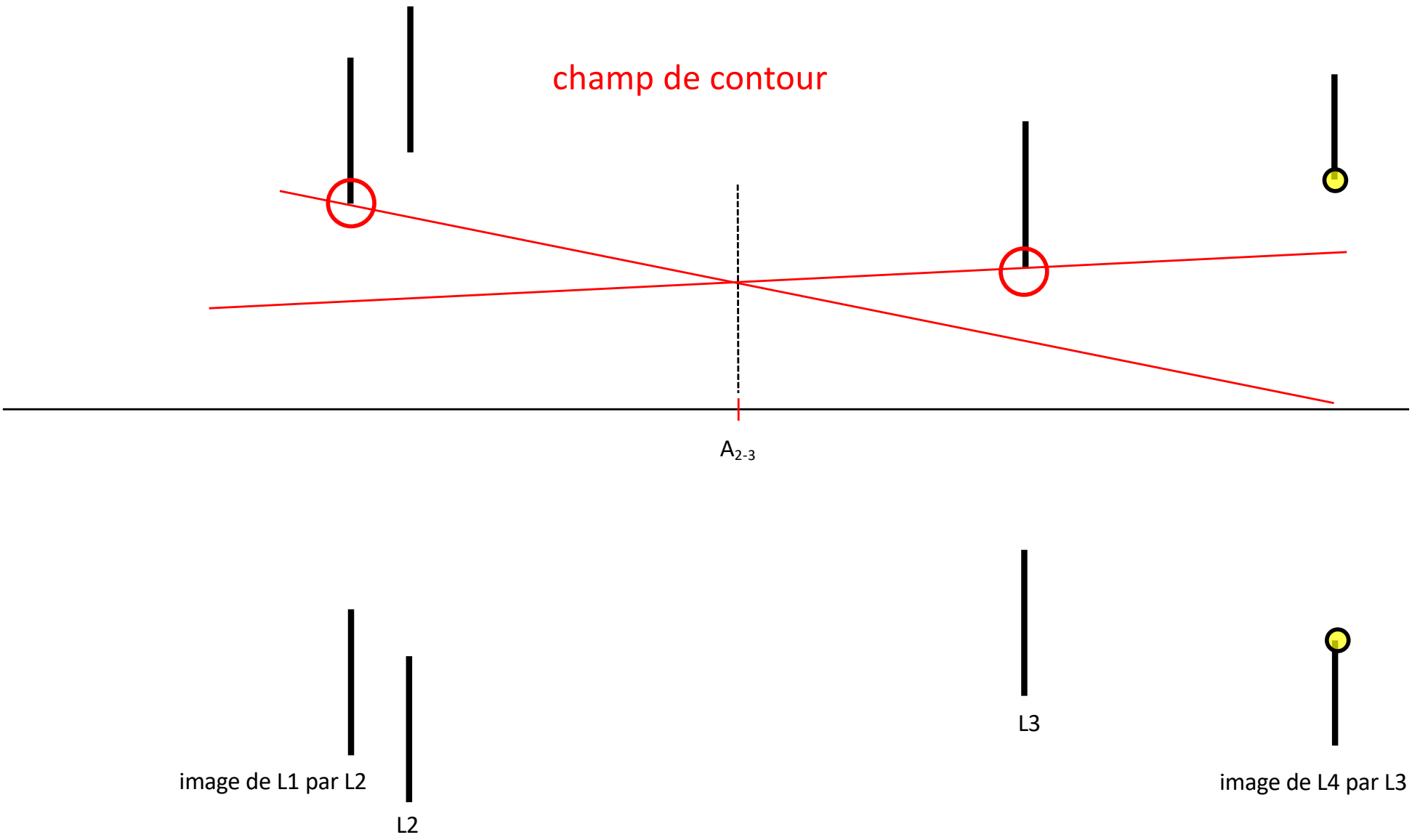
On garde à l'esprit que :
La pupille est le pivot
Les 2 rayons se croisent dans le plan image



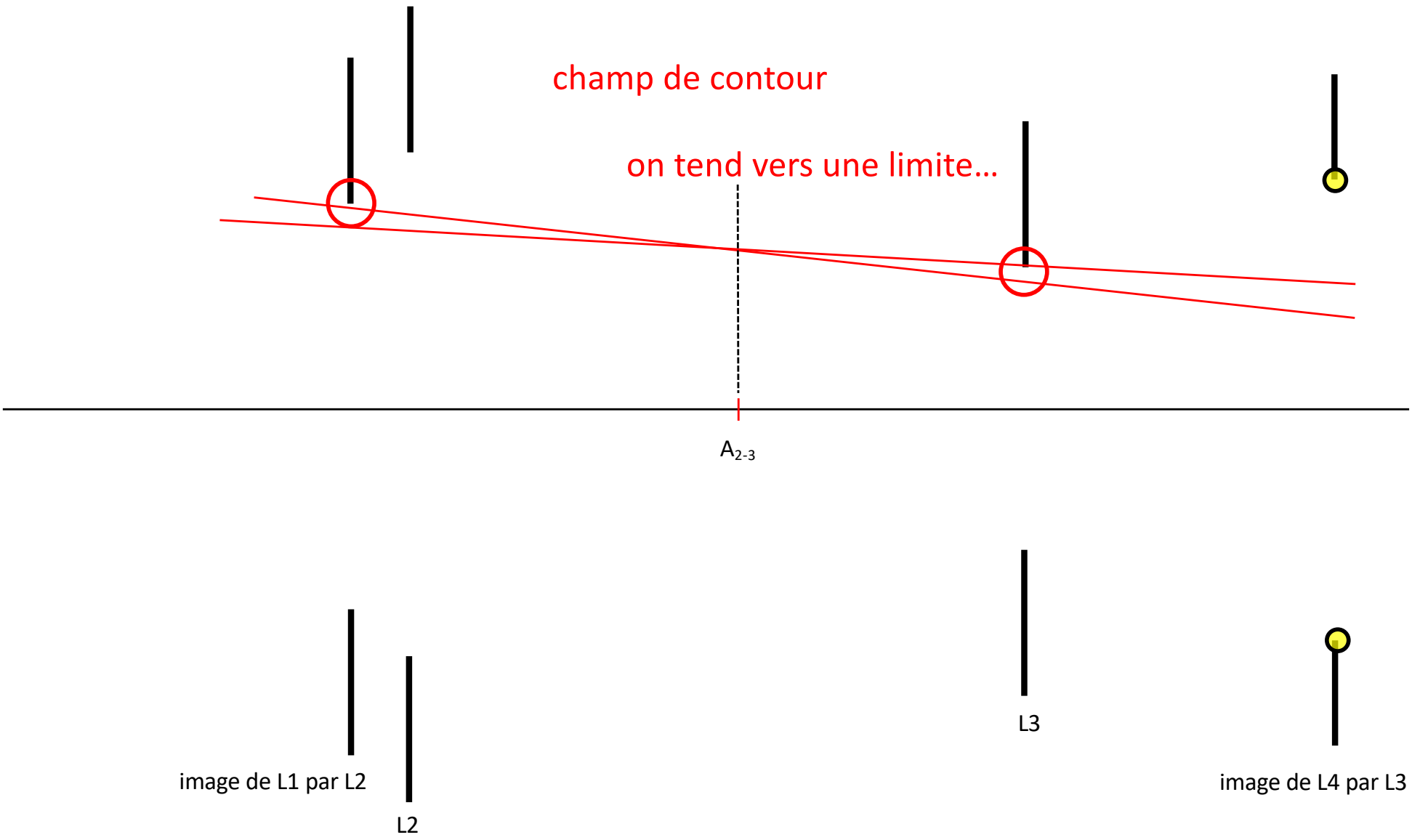
dans l'espace de $A_{2\text{-}3}$



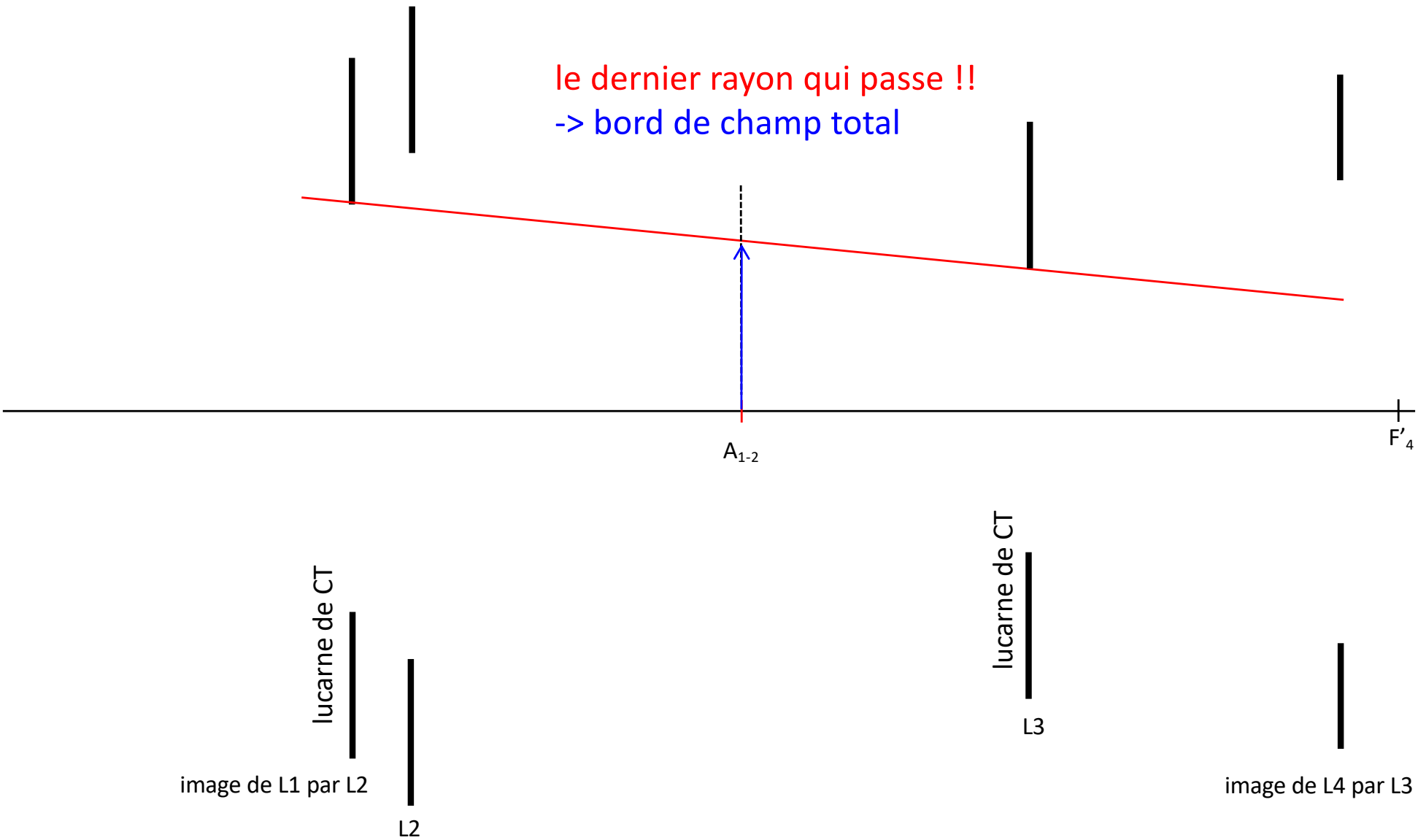
dans l'espace de $A_{2\text{-}3}$



dans l'espace de $A_{2\text{-}3}$



dans l'espace de $A_{2\text{-}3}$

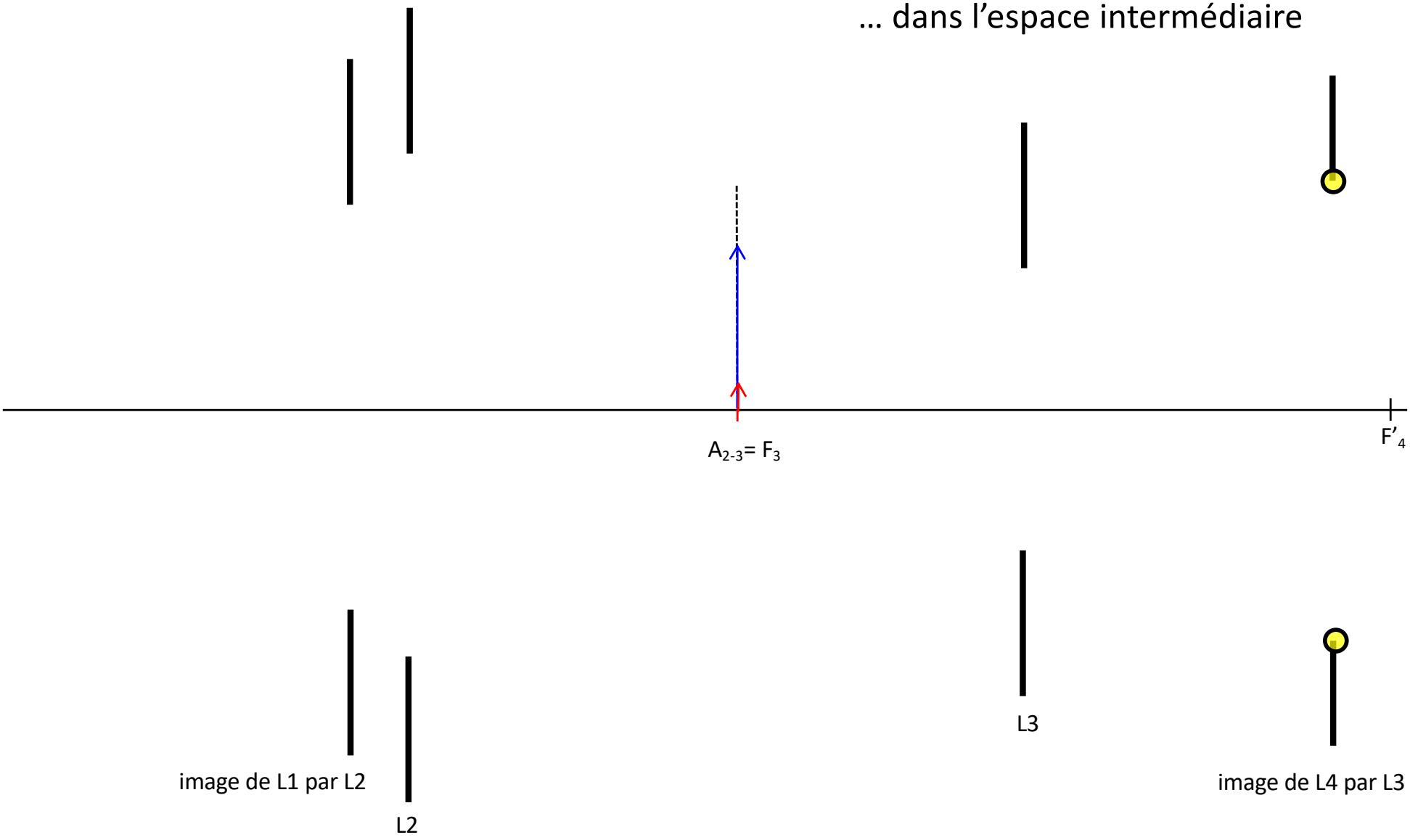


dans l'espace de $A_{2\text{-}3}$

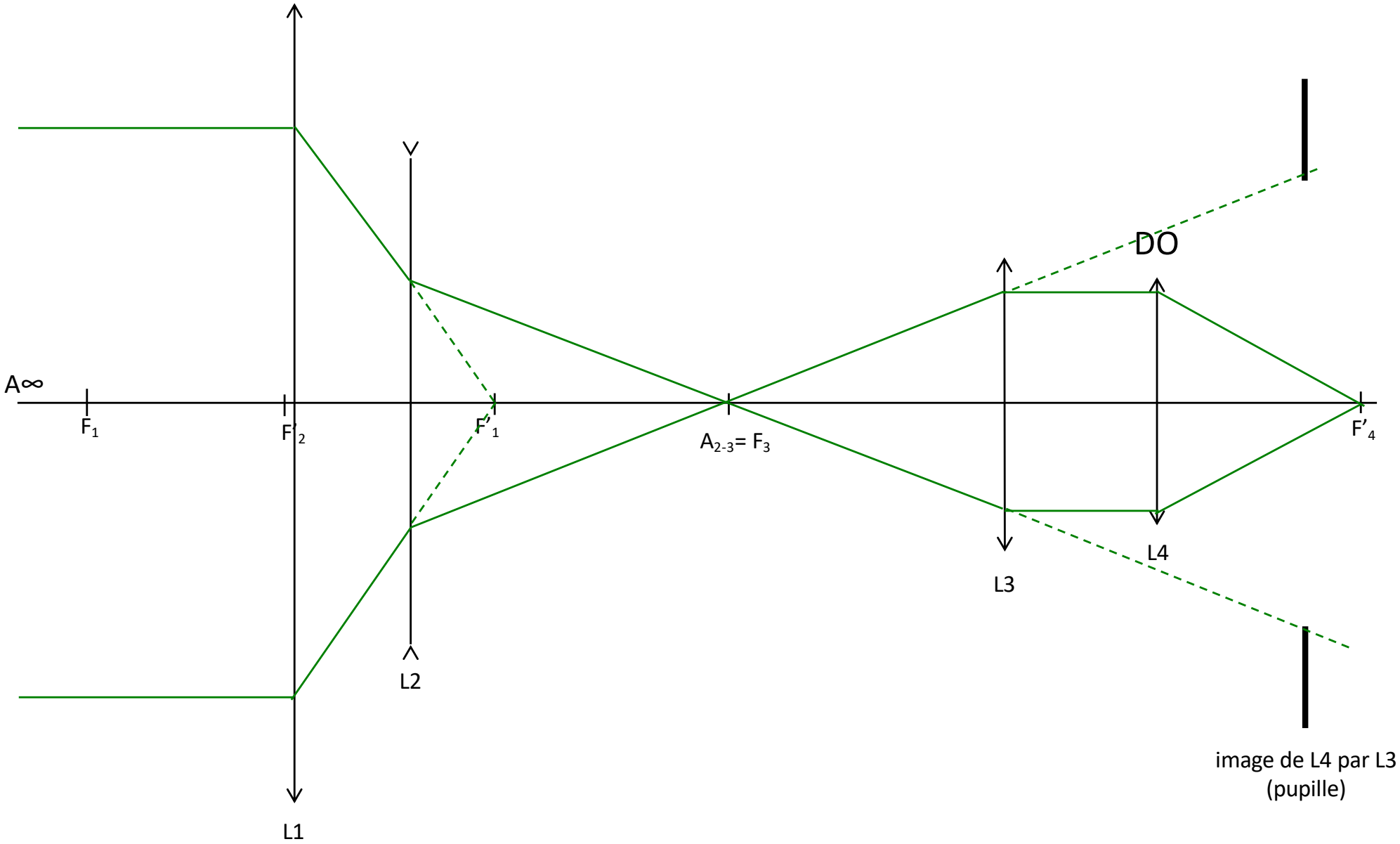
CHAMP TOTAL

CHAMP DE PLEINE LUMIERE

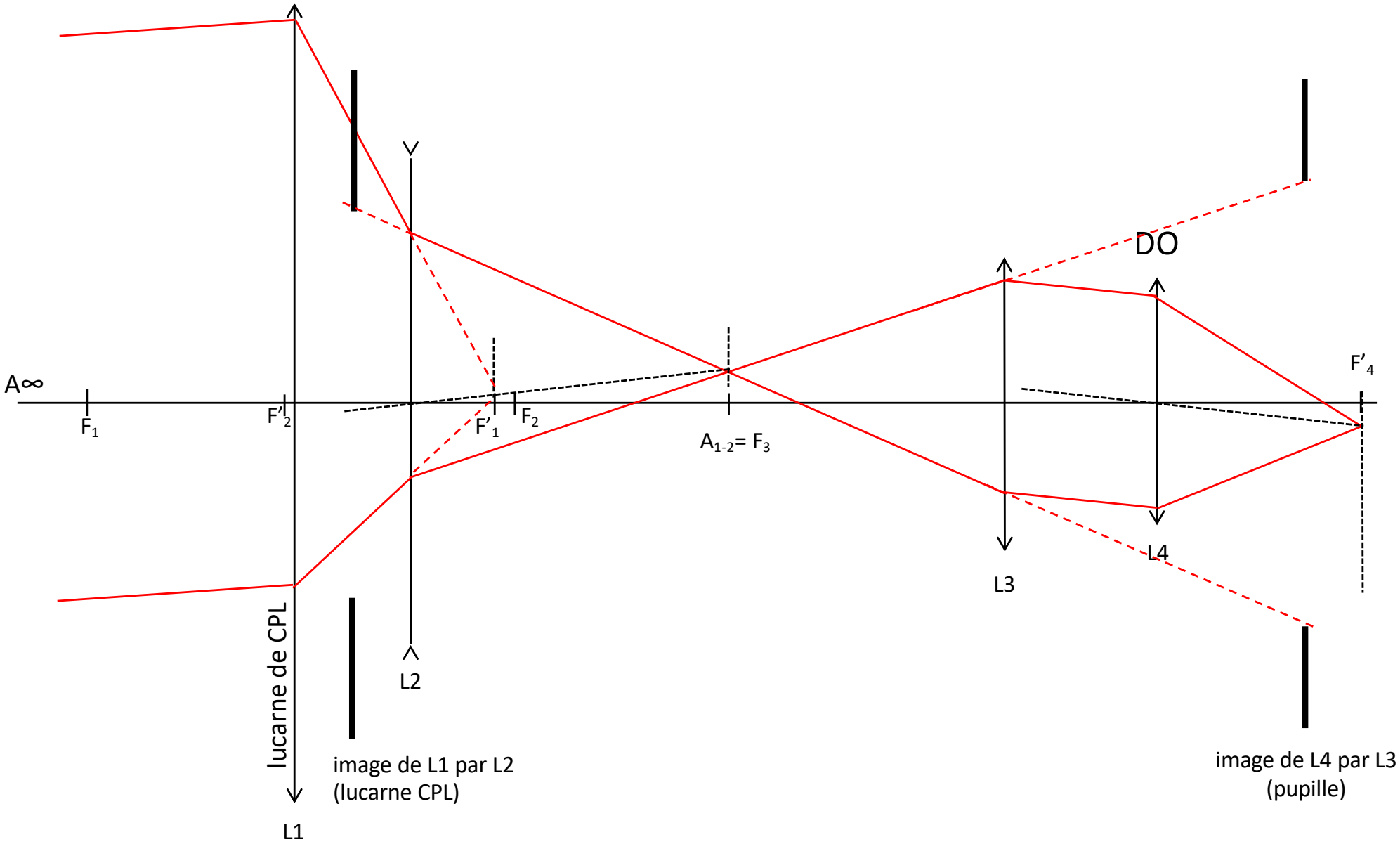
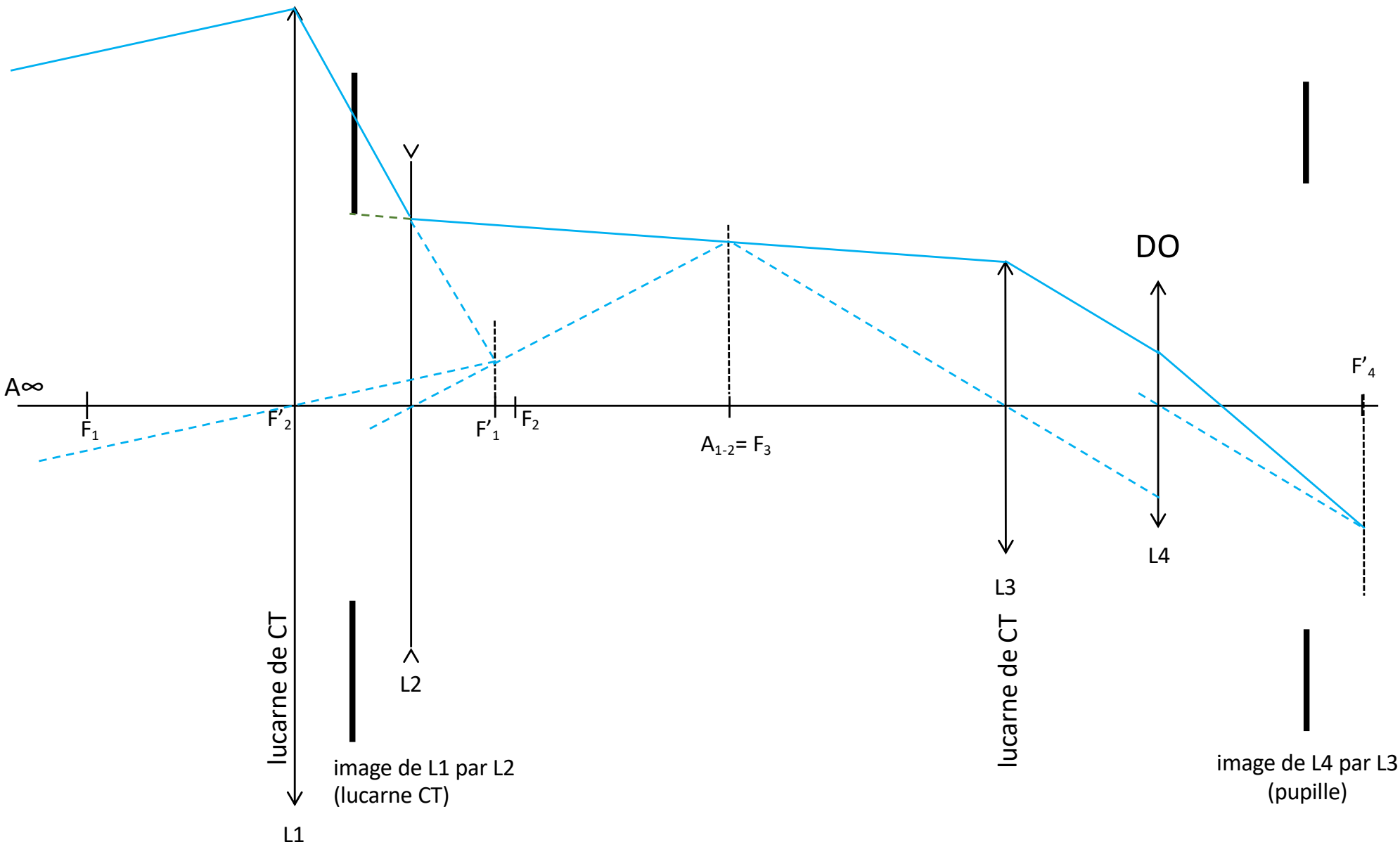
… dans l'espace intermédiaire



tracé pour un point sur l'axe



tracé pour un point en bord de CPL



tracé pour un point en bord de CT