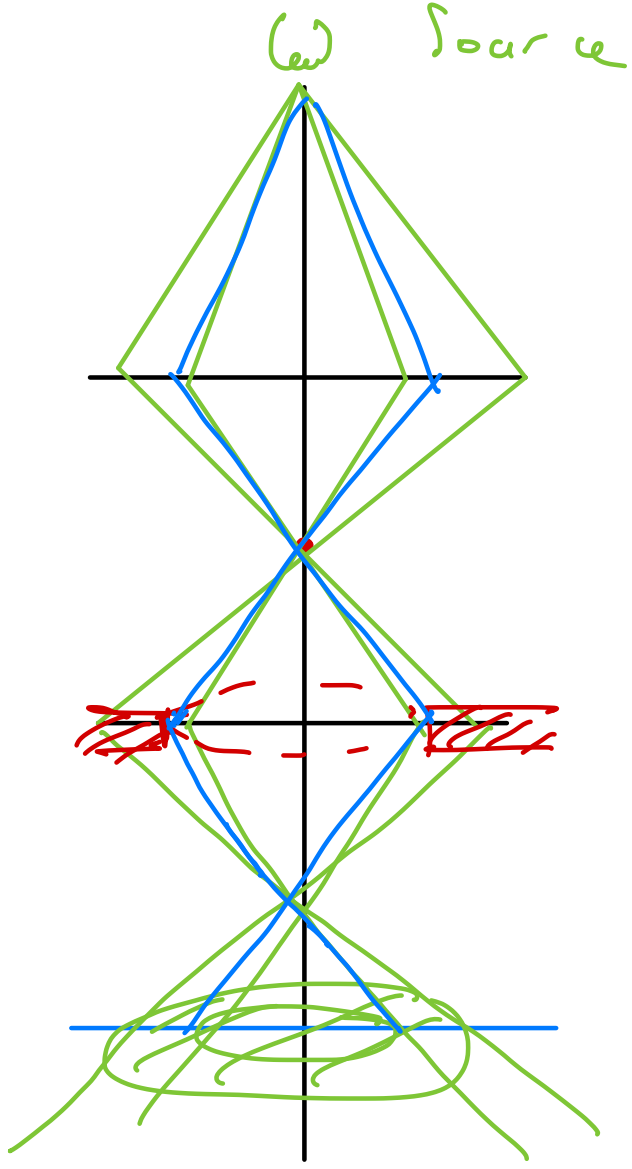
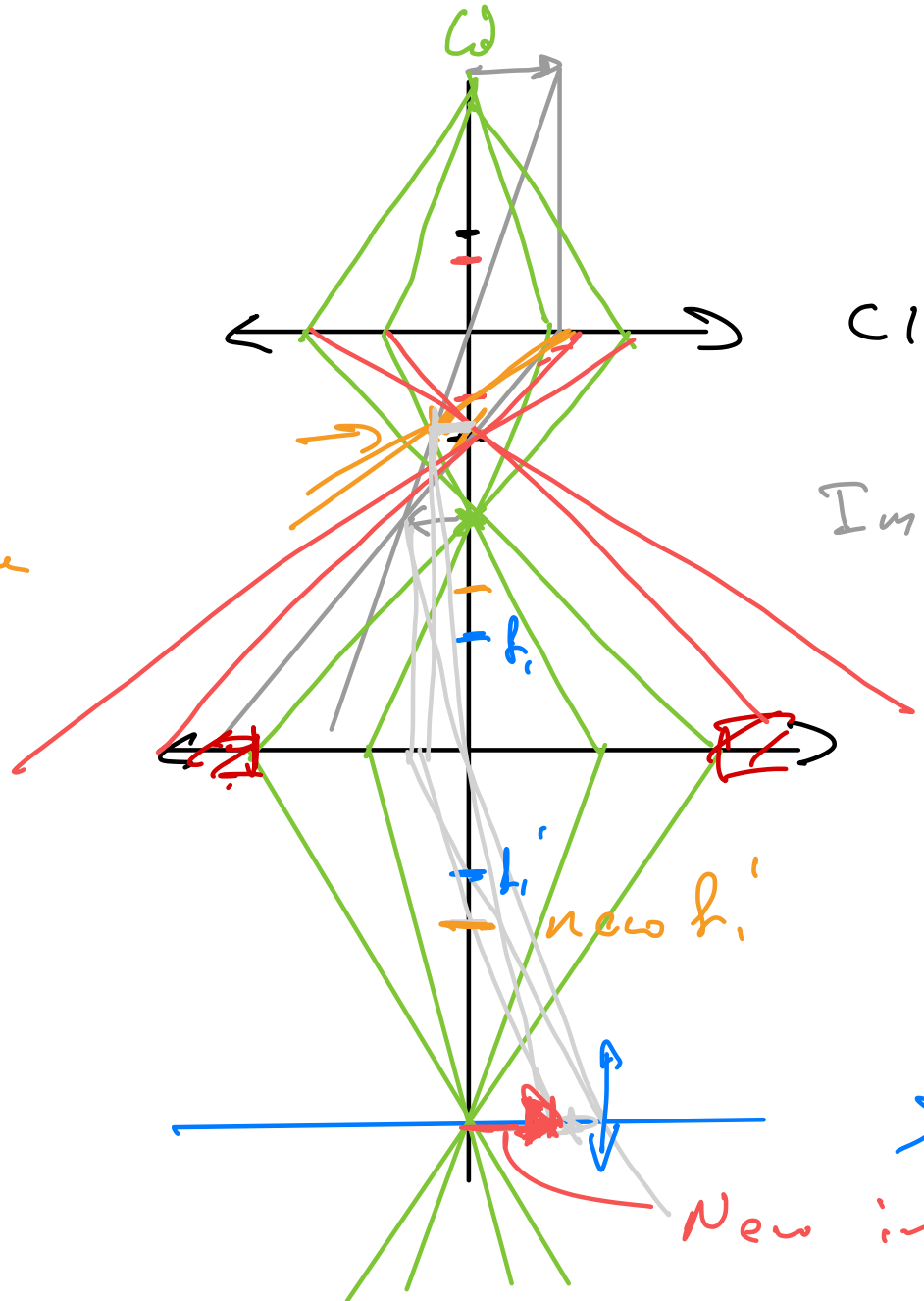


C2 aperture
- selector
e⁻ to form
beam on
sample.

Dio ↑
⇒ ↑ e⁻

EPFL

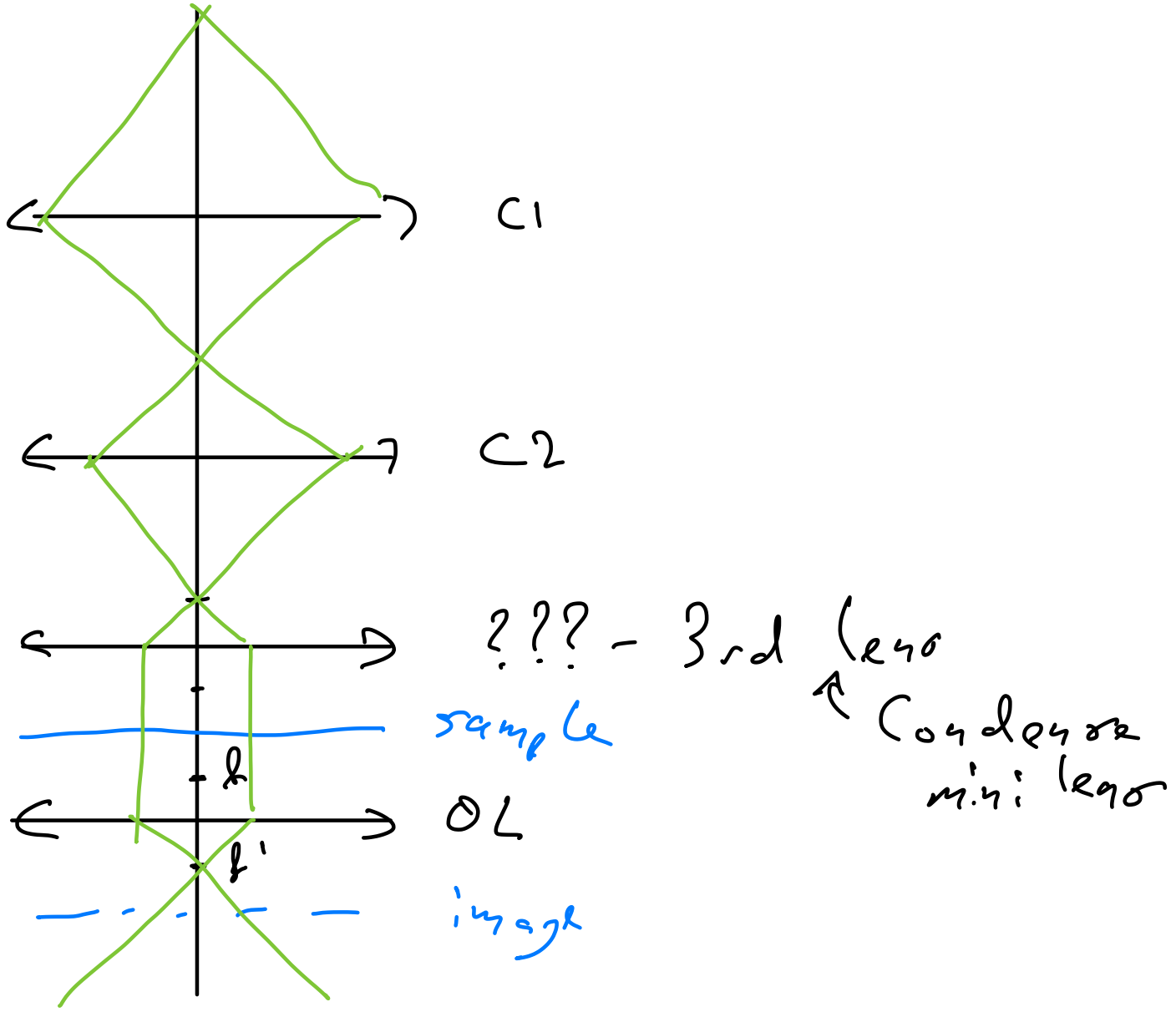


New image of source

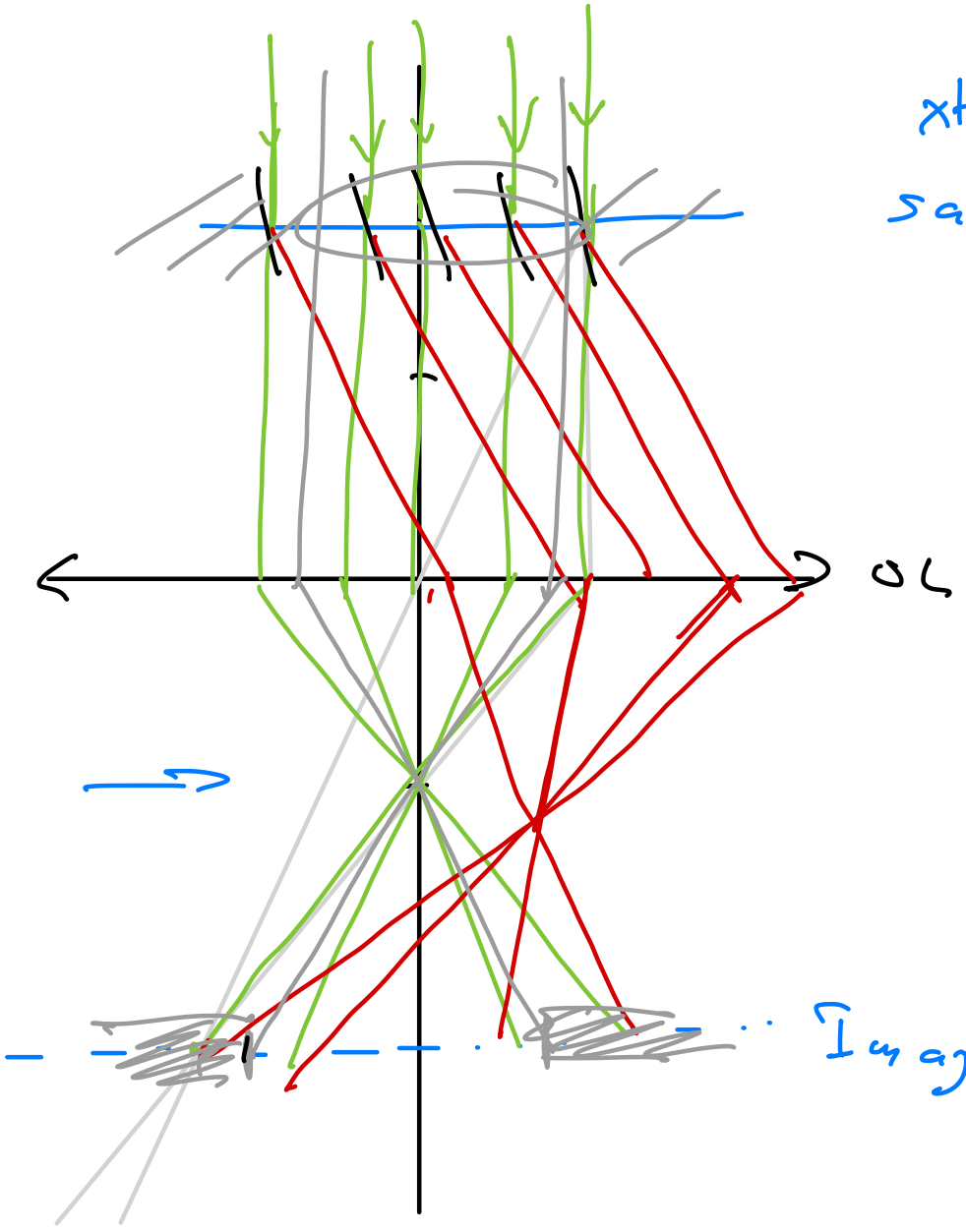
Image of source

- Greater demagnification of the source

Increase strength — less e⁻ pass through C2 aperture


C1
C2
??? - 3rd lens
↑ Condenser mini lens
sample
f
OL
f'
image

EPFL



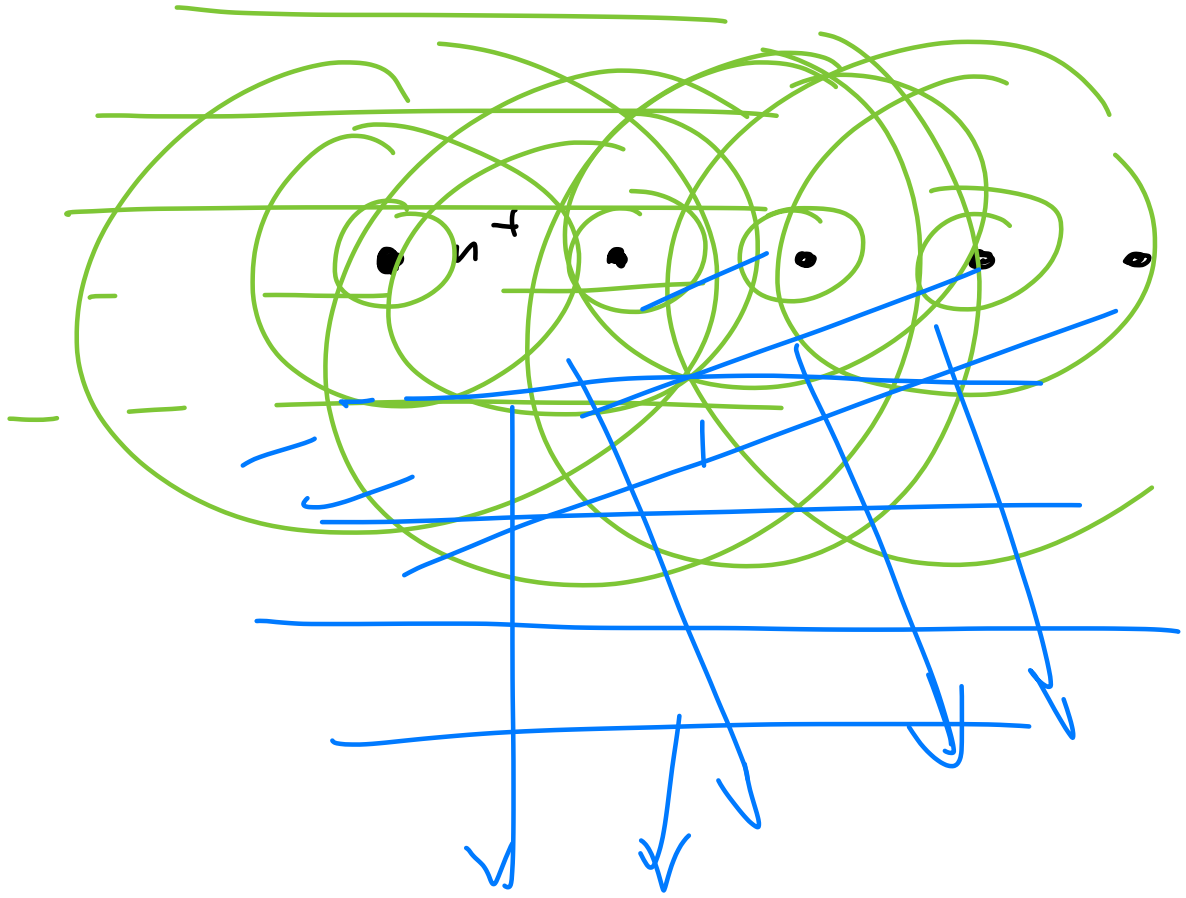
Suppose
10 μm SAA
Dia. of
sample
selected ?

Mag. of OC : 50x

Select $\frac{10\ \mu m}{50}$

$= \frac{10.10^{3}\ nm}{50}$

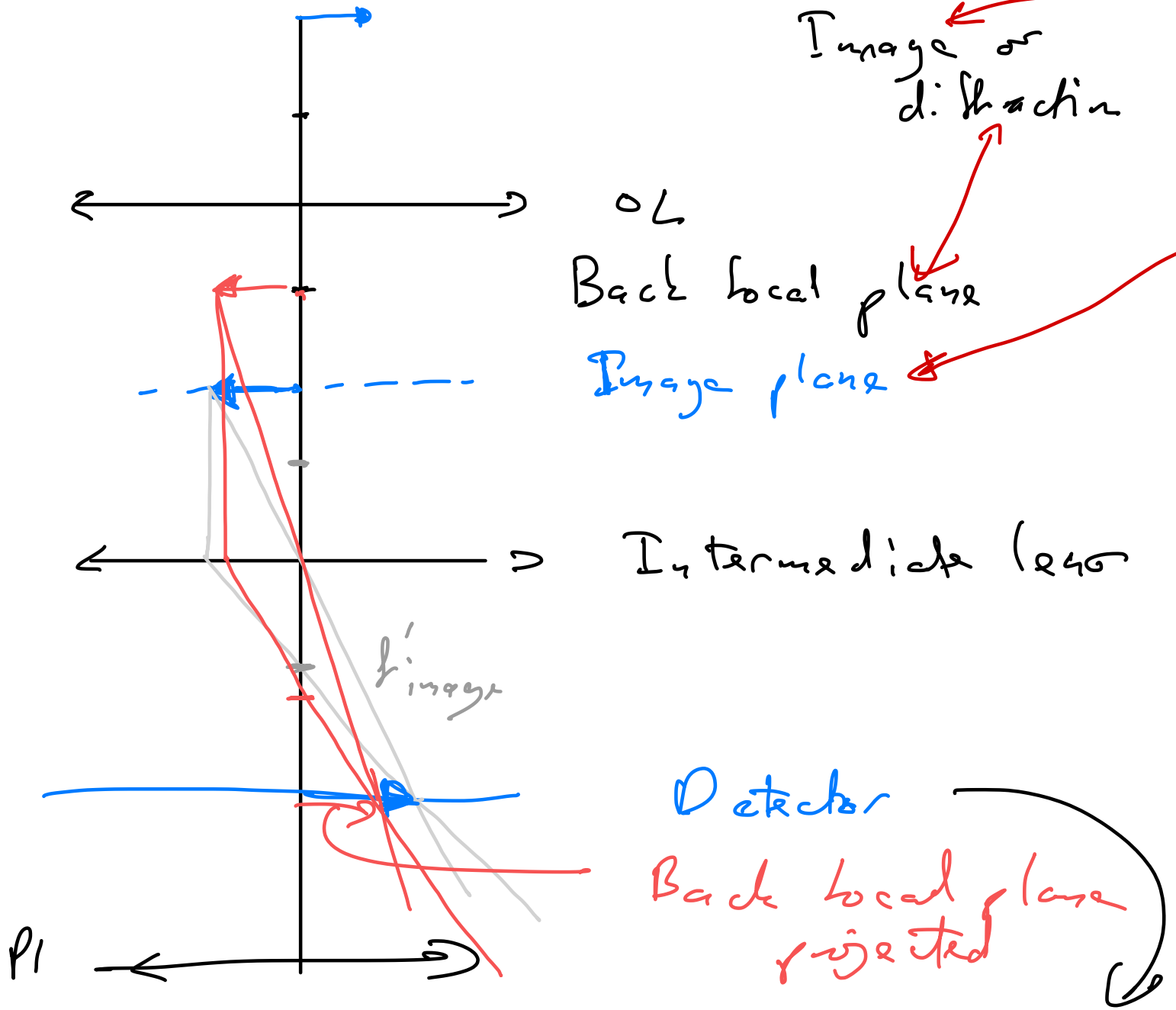
$= 200\ nm$



Huygens' principle

EPFL

To change magnification:
Need
≥ 1 projective lens after intermediate lens



EPFL

Lorentz Force!

$e.(\vec{v} \times \vec{B})$

Group A 11, 12, 14, 15, 16

B 1, 2, 4, 5, 6

C 7, 8, 9, 10

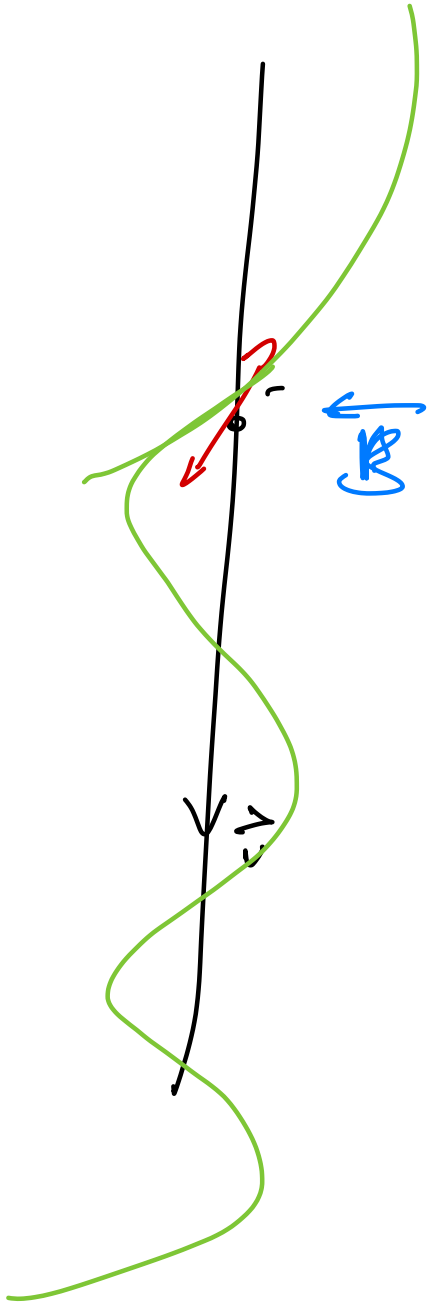
(14)

5, 5, 4

1 2 3 4 5 6 7 8

9 10 11 12 14

15 16



e⁻ spiral down column

A: Orsi

B: Talos

C: Talos...