

Hardware Meeting

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—
CRAB

Optics

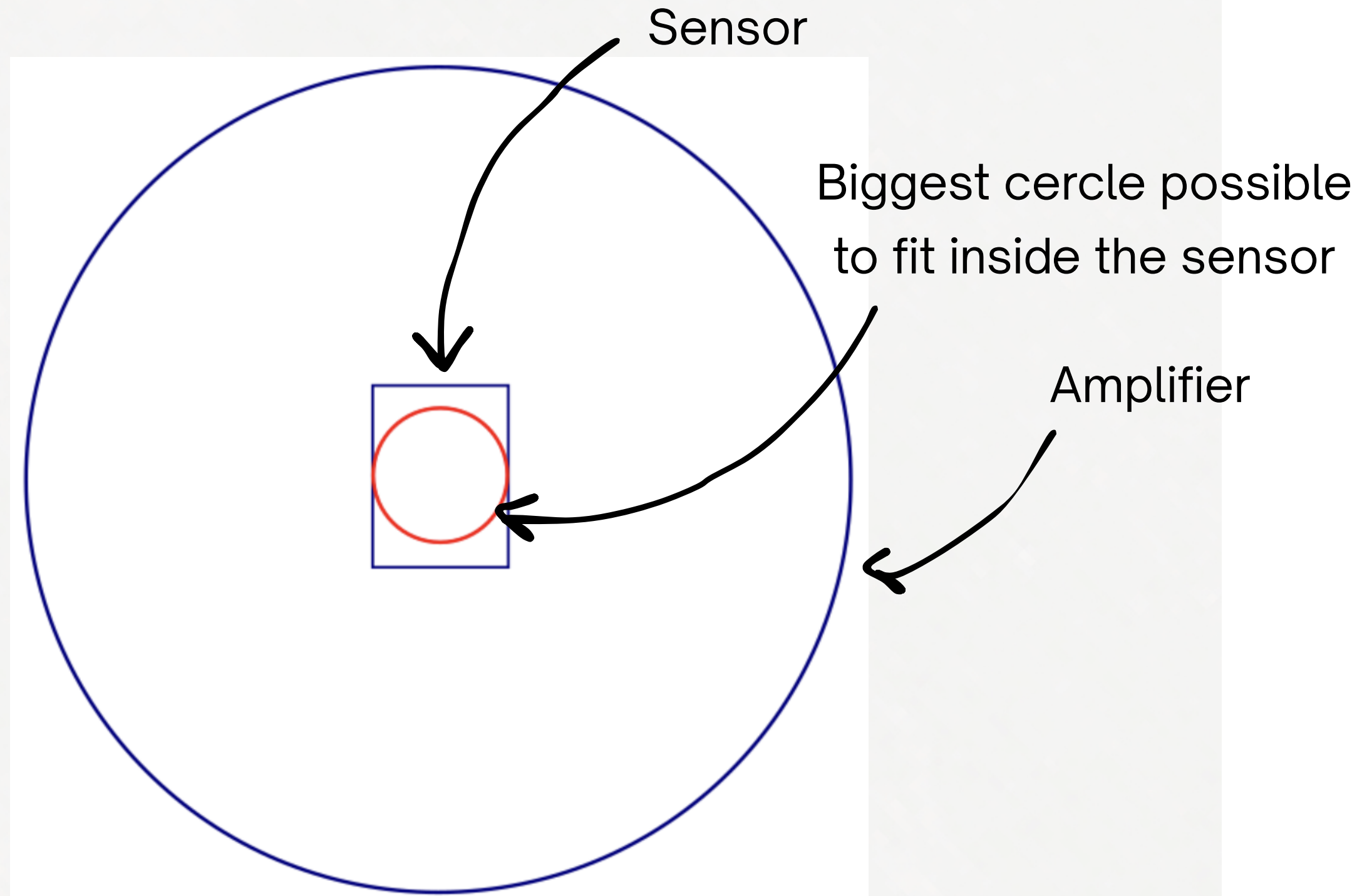
- Downloaded the software to operate the camera we have
- Took some pictures via a simple setup : camera, a screen with design, light source from one side of the camera
- We see the variation of light intensity but no sign of the designs, no resolution
- Need to use a lens to take some pictures and see something



Optics

- Magnification of about 1/6

- $M = \frac{H_S}{H_O} = \frac{3.72}{22.34} = \frac{1}{6}$



Optics

- Going to do a basic setup just to check the camera :
camera → lens → something to take a picture of

- $$\frac{1}{f} = \frac{1}{s_i} + \frac{M}{s_i} \quad s_i = f(M + 1) \quad s_o = \frac{f(1 + M)}{M}$$

- Considering $M = \frac{1}{6}$ and $f = 50\text{mm}$ → Image distance (lens-sensor) = 58.3 mm
→ Object distance = 350 mm
- Make an object of the same size than the amplifier so we don't have to change anything in the setup



LBF254-050-A

— **3D printed SiPM + Metalens holder**

The change we want to do

Two 6x6 SiPM holder → One 6x6 SiPM and one 3x3 SiPM + Metalens holder

