Syllabus

- The exam will be divided into two sections:
  1. General Questions
  2. Exercise
- The documents won't be allowed: it won't be "open document"!
- The duration will be 30 minutes.

General Questions

Here are some advice:

- Read your slides about Polarization imaging
- Understand the general physical phenomenon on polarization imaging
- Understand how we can apply polarization in computer vision
- If you have any question related to polarization, We can meet **Thursday, December 6 at 2H30pm in Condorcet**.

Exercise

You will be given common Mueller matrices and you will have to answer some questions that involve the computation of Stokes vector. See for instance the application part in the Matlab Lab:

- Show that after passing through a quarter-wave plate ($\delta = \pi/2$) oriented at 45°, a linearly polarized wave oriented at 0° becomes circularly polarized.
- Show that after passing through a half-wave plate ($\delta = \pi$) oriented at 0°, a linearly polarized wave oriented at α° becomes linearly polarized oriented at $-\alpha$°.
- Let be a beam partially linearly polarized. Show that with a rotating polarizer placed in front of the sensor a sinusoidal relationship is obtained between the angle of the polarizer and the light intensity measured.
- Using Mueller computation demonstrate the Mallus law.
- etc.