Module "Imaging through the turbulent atmosphere"

30h [Aziz Ziad, Marcel Carbillet, Éric Aristidi (Lagrange)]

Pre-requisite: module M1S1 "Imaging and instrumentation in Astronomy"
- Atmospherical turbulence: 10h Theory + 5h Lab.

+ Theory: Propagation of waves through the atmospherical turbulence, physical characterisation of the atmospherical turbulence.

+ Lab. (on-sky observations & data analysis): observations, measure of the parameters of the turbulence, data analysis.

- Image formation through turbulence: 10h Theory + 5h Lab.

+ Theory: Numerical modelling of the turbulence, the image formation (speckles), and the detector noises.
+ Lab.: speckle formation in optical laboratory, speckle imaging (data processing) from the images obtained.