Course offered for the STAT PhD program

TITLE	**Multimodal Optical Microscopy for living systems**
Lecturer	Prof. Alberto Diaspro
Duration and Credits	3 CFU (12 hrs)
Course description	Modern Light Microscopy using both fluorescent labeling and label-free methods allows to investigate the living organism up to the nanoscale. This opens up interesting perspectives for the study of the structure/function relationship of living systems at the level of organs, tissues, cells up to single molecules. We will discuss the basic principles and the most recent advances with a multimodal approach using super resolution, phase information and computational methodologies for image formation.
Course organization	Frontal lessons
Teaching period	To be decided