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## **Complex media : from imaging, to classical and quantum computing**

Abstract: Complex heterogeneous materials, that scatter light in a highly complex way, present a huge challenge for imaging (think of seeing inside or through milk or biological tissues) and a very interesting playground to study fundamental issues of wave physics. In my talk, I will discuss how shaping the wavefront of a laser allows imaging in and through complex media, well beyond what was conventionally thought possible. I will also show how complex media can be used for optical computing, and how they constitute an interesting platform to emulate linear networks for quantum computing.