

QUANTUM COMPLEX NETWORKS

Valentina Parigi

Laboratoire Kastler Brossel, Sorbonne Université

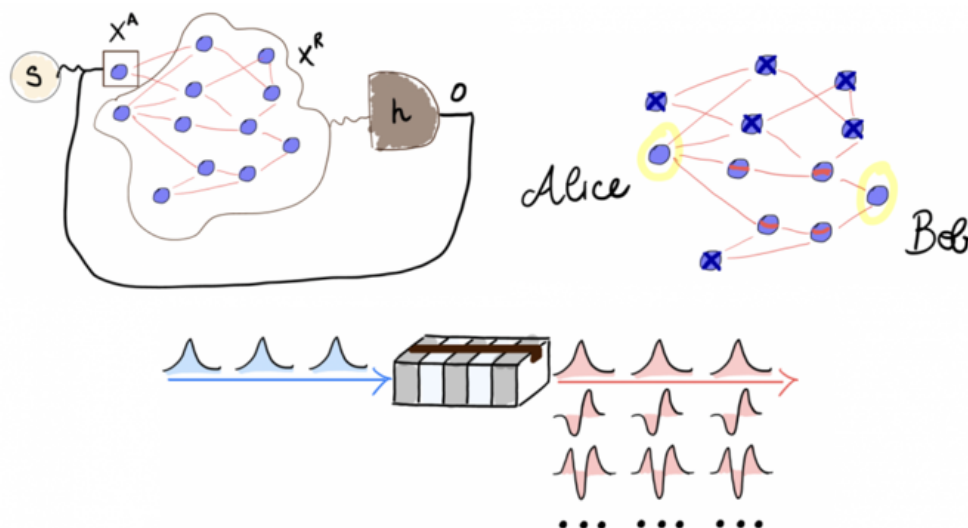
Martedì 22 Marzo 2022 ore 15:00 – Piattaforma TEAMS

(short-link: <https://bit.ly/3q4yofX>)

info: antonio.benedetto@uniroma3.it; luca.persichetti@uniroma3.it; armida.sodo@uniroma3.it

At different scales, from molecular systems to technological infrastructures, physical systems group in structures which are neither simply regular or random, but can be represented by networks with complex shape. In addition, the individual elements of natural samples, like atoms or electrons, are quantum objects.

Hence replicating complex networks in a scalable quantum platform is a formidable opportunity to learn more about the intrinsic quantumness of real world and for the efficient exploitation of quantum-complex structures in future technologies. I will show how multi-frequency light from a femtosecond laser source can be used to build quantum networks of complex shapes and the possible applications.



TEAMS extended link:

<https://teams.microsoft.com/l/meetup-join/19%3a8f9ec19800e7467ab9bae6e627dfcb21%40thread.tacv2/1647251636417?context=%7b%22Tid%22%3a%22fb4df68-f464-458c-a546-00fb3af66f6a%22%2c%22Oid%22%3a%2234c00d0e-4085-4def-be95-f11f6239bc3d%22%7d>