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## **SP2: Des réseaux de microcavités pour simuler la matière condensée avec de la lumière**

*Monday, 8 July 2019 15:15 (45)*

When light behaves as a quantum fluid in semiconductor cavities

When confining photons in semiconductor lattices, it is possible deeply modifying their physical properties. Photons can behave as finite or even infinite mass particles, photons can propagate along edge states without back scattering, photons can inherit interactions and become superfluid. These are just a few examples of properties inspired by condensed matter physics that can be imprinted into fluids of light in semiconductor lattices. Manipulating quantum fluids of light in semiconductor lattices is not only interesting for advanced fundamental studies but also present great promises for applications in photonics.

This talk will present recent developments in this very active research field

### **Choix de session parallèle**

**Presenter(s) :** BLOCH, Jacqueline (C2N Saclay/Polytechnique)