

***Note changed date:*** [Marzena Szymanska](#) Quantum Fluids of Light in and  
22 March 2017, 2pm [\(UCL\)](#) out of Equilibrium  
(Ingram Lecture Theatre)

In specially engineered light-matter structures photons can be made to interact strongly, which leads to a wide range of collective behaviours from order-disorder phase transitions and superfluidity to topological phases. However, normally their intrinsically dissipative nature results in highly non-equilibrium conditions leading to new phenomena which only start being explored. At the same time state-of-the-art semiconductor microcavities allowed recently to achieve a fully thermalised photonic system analogous to cold atoms or liquid Helium. I will discuss a few examples of non-equilibrium collective effects in such systems, as well as the recently achieved equilibrium limit.