The concept of deconfined quantum criticality was introduced by Senthil et al. in 2004. The idea was that two ordered phases of matter breaking spontaneously distinct symmetries of some given Hamiltonian could, under certain conditions, be related through a continuous phase transition. I will explain that the core idea of deconfined quantum criticality is at play in the phase diagram of a well-known one-dimensional spin-1/2 frustrated quantum magnet. I will also explain how this core idea could be realized in three-dimensional space.

Tuesday March 12th 2019 at 12:15

Auditoire CUB III, room BSP 233, (Cubotron), EPFL