

**Seminarium Studium Doktoranckiego NCBJ**  
**Thursday, 12 March, 9:00**  
**Sala 404 w NCBJ, Pasteura 7**

**Speaker:**

Viktor Svensson (Studium Doktoranckie NCBJ)

**Title:**

From spin chains to real-time thermal field theory using tensor networks

**Abstract:**

While static properties of quantum field theories have been studied successfully using Lattice Gauge Theory (LGT), the dynamics of such theories presents additional challenges. Drawing from ideas from quantum information, Tensor Networks (TN) have become an increasingly popular approach to simulate quantum systems numerically, evading some of the limitations of LGT. In this talk, I will describe the basic theory of TN and our use of them to study real time dynamics.