

*Organisé conjointement par  
CPHT-École Polytechnique et Groupe Théorie IPN Orsay*

## **SÉMINAIRE de PHYSIQUE des PARTICULES**

**Luca Mantovani**  
(Pavia U.)

### **Light-front quantization methods: from QED to QCD**

**Résumé :**

I present an overview of the basic concepts concerning the formalism of light-front quantization for field theories, usually applied in the framework of hadron physics. I describe some applications in the field of Quantum Electrodynamics, focusing in particular on the Transverse-Momentum Dependent distribution functions (TMDs) for the case of a dressed electron, and discuss some subtleties related to the features of the gauge-field propagator in light-cone gauge. I also give a hint about an application in the field of Quantum Chromodynamics, concerning the nucleon's energy-momentum tensor.

**Jeudi 24 Novembre 2016**

**11:00**

**Salle de conférences, bât. 6**