

## SEMPARIS – Séminaires en région parisienne

[http ://string.lpthe.jussieu.fr/semparis/](http://string.lpthe.jussieu.fr/semparis/)

### Seminares du LPTM , Universite de Cergy Pontoise

**Jeudi 14 Décembre 2017, 14 :00**

LPTM, 4.13 St Martin II

Domaines : math-ph

Titre : *Non-linear Schrödinger approach to Mean Field Games*

Orateur : **Thibault Bonnemain ( LPTM UCP Cergy Pontoise )**

Résumé : *Mean field games were introduced in the mathematical and engineering community as a way to deal with optimization problems involving a large number of interacting agents. I will show there is a strong formal link between an important class of mean field games models and the non-linear Schrödinger equation that allows for the implementation of effective approximation schemes to solve the mean field games equation. In particular, I will discuss the example of a simple (but non-trivial) model of population dynamics.*

---