## SEMPARIS – Séminaires en région parisienne

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## Seminar of the theory group of APC

Mardi 23 Mai 2017, 14 :00 APC, 454 A - Valentin Domaines : hep-th

Titre : Carroll Symmetry, Gravitational Memory and Soft Gravitons

## Orateur : Gary Gibbons ( Cambridge University )

Résumé : In the first part of my talk I will discuss the notion of relativity principle, kinematic algebras, the classification of Leblond and Bacry I will define the Carroll group and its extensions. I will gave Applications to very special Relativity String theory and the BMS algebras. In the second part I will discuss plane gravitational waves and how the a subgroup of the Carroll group acts and how this can be used illuminate the currently fashionable topics of gravitational memory and soft gravitons. The talk is aimed at a general audience with a background in Mathematical Physics.