

SEMPARIS – Séminaires en région parisienne

<http://string.lpthe.jussieu.fr/semparis/>

Séminaires cette semaine dans la série RENC-THEO

Jeudi 25 Janvier 2018, 10 :00

LPTHE, IMPMC, salle 401, tour 22-23, 4eme étage(Beware, unusual location!)

Rencontres Théoriciennes

Domaines : hep-th

Titre : *The large D limit of holographic turbulence*

Orateur : **Amos Yarom** (Technion)

Résumé : *I will discuss a recent attempt at gaining a handle over turbulent behaviour of fluids by appealing to the gauge gravity duality in the limit where the number of dimensions becomes very large. We will see that in this limit the gauge gravity duality simplifies and that the dynamics of the system are encoded in the large d limit of the hydrodynamic equations of motion.*

Jeudi 25 Janvier 2018, 11 :45

LPTHE, IMPMC, salle 401, tour 22-23, 4eme étage(Beware, unusual location!)

Rencontres Théoriciennes

Domaines : hep-th

Titre : *New duality symmetric theories from twisted strings*

Orateur : **Piotr Tourkine** (CERN)

Résumé : *Twistor strings have undergone a renewal of interest since the discovery of the Cachazo-He- Yuan formalism for scattering amplitude in field theory in 2013. These formulae deeply challenge the way we think about scattering amplitudes in quantum field theory and are neatly explained by the so-called ambitwistor string, a cousin of the old twistor string.*

The existence of these remarkable formalisms, which I shall present during

the talk, cried for a connection to good old string theory. The answer to this question is now understood : it relies on counter-intuitive limits and crucially, the existence of a different quantization for string theory, which we called twisted strings. The first part of the talk will be concerned on making that connection to string theory clear. In the second part, I will report on recent results obtained with Eduardo Casali on the winding modes of these twisted strings. They give rise to new exotic target space theories, naively non unitary, but exhibiting features half way between string and field theory. In particular, they are T-duality symmetric.
