Mini-conference on String Theory

June 1st, 2010

On Tuesday June 1st the LPTHE/LPTENS are organising a mini-conference on various topics in string theory. The mini-conference will start at 13:30 and will consist of four 45-minute talks with a short break in the middle. It will take place at the ENS in Salle IV. The schedule is as follows:

- 13h30: **David Tong**

  "Strange Metals and Conductivity in Lifshitz Backgrounds"

  `Abstract`: I will describe some of the anomalous transport properties observed in "strange metals". These are optimally doped unconventional superconductors above the phase transition. I will present some results for conductivity computed in holographic backgrounds with Lifshitz scaling.

- 14h20: **Martin Schnabl**

  "On multiple branes in OSFT"

  `Abstract`: We describe some novel solutions in open string field theory and present a convincing evidence that they correspond to multiple space-filling D-branes.

- 15h10-15h30: *Break*

- 15h30: **Vasily Pestun**

  "Loop operators in N=4 SYM, pure spinors and 2d gauge theory"

  `Abstract`: I will review the recent progress on the exact computation of expectation values and correlation functions in $\mathcal{N} = 4$ SYM involving 't Hooft and Wilson loops with certain supersymmetry. If the supersymmetry parameter is a pure spinor on a two-dimensional subspace S^2 of the space-time, then the correlation functions of certain Wilson loops on S^2 and certain 't Hooft loops, linked with the S^2, are computed by localization to a two-dimensional gauge theory on S^2, which is a semi-topological version of Yang-Mills-Hitchin theory.

- 16h20: **Rajesh Gopakumar**

  "What is the String Dual of the Hermitian Matrix Model?"

  `Abstract`: In this talk I will describe diverse clues which suggest a fairly coherent picture for what thestring dual of the simple hermitian one matrix model (in the conventional 't Hooft limit) might be like.