

# *Chez Pierre*

Presents ...

**Wednesday, September 7, 2011**

**11:00am**

**MIT Room 4-331**



## **SPECIAL CHEZ PIERRE SEMINAR**

**Leon Balents**

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***"Weyl semimetals - the next graphene?"***

The boom in topological insulators has sparked a more general interest in materials with strong spin-orbit coupling. Another interesting state which may occur in compounds with compositions and structures very similar to topological insulators is the Weyl semimetal. Though the idea for such a state dates back to the beginnings of the theory of solids, it appears now likely to be observed in the near future.

Such systems have a linear spectrum similar to that of graphene, but in three dimensions, and possess both topological aspects to their behavior and interesting bulk transport properties.