1020-46-137 **Henri Moscovici*** (henri@math.ohio-state.edu), Department of Mathematics, The Ohio State University, Columbus, OH 43210. *Twisted spectral triples.*

We report on joint work with A. Connes showing how the twisting of the notion of spectral triple allows to incorporate type III examples, such as those arising from the transverse geometry of codimension one foliations. The Connes-Chern character for finitely summable spectral triples extends to the twisted case and lands in ordinary (untwisted) cyclic cohomology. The index pairing with ordinary (untwisted) K-theory continues to make sense and the index formula is still given by the pairing with the Connes-Chern character. (Received August 24, 2006)