Meeting: 1001, Evanston, Illinois, SS 18A, Special Session on Applications of Motives

## 1001-14-159 **Yves Andre\*** (Yves.Andre@ens.fr). On some parity questions about pure and mixed motives. Preliminary report.

We shall first discuss sign problems in the commutativity constraint  $M \otimes N \cong N \otimes M$  for pure and mixed motives, then explain how representation theory of Lie super-algebras helps understanding the standard sign conjecture, and discuss several other parity problems in the context of the Kimura-O'Sullivan philosophy. (Received August 23, 2004)