1131-46-173   **Florent Pierre Baudier*** (`florent@math.tamu.edu`), Texas A&M University, College Station, TX 77843, and **Gilles Lancien** and **Thomas Schlumprecht**. *A new concentration inequality and its applications to coarse geometry.*

A new concentration inequality for Lipschitz maps on the infinite Hamming graphs and taking values in Tsirelson's original space will be discussed. This concentration inequality is then used to disprove the conjecture that the separable infinite dimensional Hilbert space coarsely embeds into every infinite dimensional Banach space. This question arose from the work of G. Yu in the late 90's about the coarse geometric Novikov conjecture. A rigidity result pertaining to the spreading model set for Banach spaces coarsely embeddable into Tsirelson's original space will also be discussed.

Joint work with G. Lancien and Th. Schlumprecht (Received July 13, 2017)

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