

1116-05-1691      **Uli Wagner\*** ([uli@ist.ac.at](mailto:uli@ist.ac.at)), IST Austria, Am Campus 1, 3400 Klosterneuburg, Austria.  
*Pseudorandomness & Higher-Dimensional Topological Expansion*. Preliminary report.

We will discuss connections between two topics that are closely related but seem to be studied by mostly disjoint communities:

1. quasirandomness properties of hypergraphs (in particular, of *sparse hypergraphs*), such as Gowers uniformity norms and cut norms; and
2. higher-dimensional *topological expansion properties* of simplicial complexes, as introduced in the work of Gromov and of Linial and Meshulam.

We will present some preliminary results, but mostly focus on questions and open problems. (Received September 21, 2015)