1106-46-1977   **George A. Elliott*** (`elliott@math.toronto.edu`), Department of Mathematics, University of Toronto, Toronto, Ontario M5S 2E4, Canada, and **Zhuang Niu**, **Luis Santiago**, **Aaron Tikuisis** and **Wilhelm Winter**. *Some recent results related to the Toms-Winter conjecture.*

A major part of the Toms-Winter conjecture (concerning the existence of a robust well-behaved class of amenable, or nuclear, C*-algebras) is that a Jiang-Su stable finite separable amenable simple unital C*-algebra should have finite decomposition rank.

This is known if the algebra is approximately homogeneous (AH), and also if it belongs to the class of approximately subhomogeneous (ASH) C*-algebras recently classified by Gong, Lin, and Niu (perhaps all Jiang-Su stable simple unital ASH algebras). It is also known if the space of traces is a Bauer simplex and the algebra has a quasidiagonal representation realizing any given trace (Matui and Sato; Bosa, Brown, Sato, Tikuisis, White, and Winter).

The present authors have shown this for any Jiang-Su stable ASH C*-algebra (no condition on traces, and even not assuming that the algebra is simple or unital).

In fact, the proof is valid for a locally subhomogeneous C*-algebra (not known to be an inductive limit), and this is of interest since the tensor product of a simple C*-algebra arising from a homeomorphism of a metrizable compact space with a UHF algebra is locally subhomogeneous, and so as a consequence (since a UHF algebra is Jiang-Su stable), has finite decomposition rank. (Received September 15, 2014)