Sébastien Ferenczi. Examples of interval exchanges satisfying Veech and Sarnak.

Abstract. We build examples, for every number of intervals greater than three, and every Rauzy class, satisfying both Veech's conjecture (initially stated as a question) on simplicity, and Sarnak's conjecture on orthogonality with the Moebius function. To achieve that, we use criteria of del Junco and Rudolph, resp. Bourgain, using a generation of the system by Rokhlin towers, and we build these towers through a generalization of the self-dual induction developed by L. Zamboni and myself. Joint work with Christian Mauduit.