

1125-19-348

Roger Plymen* (r.j.plymen@soton.ac.uk), Mathematical Sciences, Southampton, SO17 1BJ, United Kingdom. *Extended affine Weyl groups, the Baum-Connes correspondence and Langlands duality.*

Let G be a compact connected semisimple Lie group. Let $W'_a(G)$ be the associated extended affine Weyl group. We investigate the K -theory of the reduced C^* -algebra of $W'_a(G)$. We show that rationally this K -theory does not change if we replace G by its Langlands dual. Of special interest is the A_{n-1} tower of groups $SU_n(\mathbb{C})/C_k$ where k divides n . We investigate with many numerical examples how the K -theory groups change as we work our way through such a tower. Joint work with Graham Niblo and Nick Wright. (Received September 16, 2016)