On fundamental groups of certain property (T) factors

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Calculation of Fundamental groups of type II_1 factors is, in general, an extremely important and difficult problem. In this direction, a conjecture due to A. Connes states that the Fundamental group of the group von Neumann algebra $\mathcal{L}(G)$, where G is an i.c.c. property (T) group, is trivial.

In this talk, I shall provide the first examples of property (T) group factors with trivial Fundamental group. This talk is based on a recent joint work with Ionut Chifan, Sayan Das and Cyril Houdayer.