

1145-57-1148

Sara Maloni* (sm4cw@virginia.edu), 911 Flat Waters Lane, Charlottesville, VA 22911, and
Frederic Palesi and **Tian Yang**. *On type-preserving representations of thrice punctured projective plane group.*

Abstract: In this talk we consider type-preserving representations of the fundamental group of the three-holed projective plane N into $\mathrm{PGL}(2, \mathbb{R})$. First, we prove Kashaev's conjecture on the number of connected components with non-maximal euler class. Second, we show that for all representations with euler class 0 there is a one simple closed curve which is sent to a non-hyperbolic element, while in euler class 1 or -1 we show that there are six components where all the simple closed curves are sent to hyperbolic elements and 2 components where there are some simple closed curves sent to non-hyperbolic elements. This answers a generalisation of a question asked by Bowditch. In addition, we show also, in most cases, that the action of the pure mapping class group $\mathrm{Mod}(N)$ on these non-maximal components is ergodic. (This is joint work with F. Palesi and T. Yang.) (Received September 19, 2018)