## $\label{eq:cristian} \textbf{CRISTIAN ROSENDAL}, \ \textbf{University of Illinois at Urbana-Champaign}$

On the algebraic structure of the unitary group

We study the unitary group of separable infinite dimensional complex Hilbert space as a discrete group and show that all of its actions by isometries on a metric space have orbits of finite diameter. This property is enough to ensure that the unitary group also satisfies properties FH and FA of Serre.

This is a joint work with Eric Ricard of CNRS, Université Franche-Comté.