

1015-46-318

Eric Ricard, Besancon, France, and **Christian Rosendal*** (rosendal@math.uiuc.edu),
Department of mathematics, 273 Altgeld Hall, MC 382, 1409 W. Green Street, Urbana, IL 61801.

Isometric actions of the unitary group. Preliminary report.

We study the unitary group of separable Hilbert space as an abstract group and prove that any action of the group by isometries on a metric space has bounded orbits. In particular, the group thus satisfies Serre's property (FH) and has finite width with respect to any generating set. (Received February 08, 2006)