

1099-05-96

Jakub Jasinski* (jjasinsk@ucalgary.ca), 2500 University Dr NW, Calgary, Alberta T2N 1N4, Canada, **Claude Laflamme** (laflamme@ucalgary.ca), 2500 University Dr NW, Calgary, Alberta T2N 1N4, Canada, **Lionel Nguyen Van Thé** (lionel@latp.univ-mrs.fr), 39, rue F. Joliot Curie, 13453 Marseille, France, and **Robert Woodrow** (woodrow@ucalgary.ca), 2500 University Dr NW, Calgary, Alberta T2N 1N4. *Ramsey Precompact Expansions of Homogeneous Directed Graphs.*

In 2005, Kechris, Pestov and Todorcevic provided a powerful tool to compute an invariant of topological groups known as the universal minimal flow, immediately leading to an explicit representation of this invariant in many concrete cases. More recently, the framework was generalized allowing for further applications, and the purpose of this paper is to apply these new methods in the context of homogeneous directed graphs.

In joint work with Claude Laflamme, Lionel Nguyen Van Thé and Robert Woodrow, I have shown that the age of any homogeneous directed graph allows a *Ramsey precompact expansion*. Moreover, we have verified the relative expansion properties and consequently have described the respective universal minimal flows. (Received January 30, 2014)