THE CATHOLIC UNIVERSITY OF AMERICA
Washington, DC 20064

SEMINAR IN FUNCTIONAL ANALYSIS

AND RELATED AREAS

Wednesday, September 27, 2023

4:45 p.m. - 6:30 p.m. (including a coffee break)

SPEAKER: Professor Neil Hindman
Howard University

TITLE: Must piecewise syndetic sets have positive density?

ABSTRACT: In the set N of positive integers, there are a large number of notions of largeness, and the relations among them are known. In particular any piecewise syndetic set has positive Banach density. If S is a semigroup satisfying the strong Folner condition (SFC), which includes all commutative semigroups as well as all left cancellative left amenable semigroups, God's notion of density is Folner density. (I shall support that statement.)
Folner density and Banach density agree on N. We do not know whether every piecewise syndetic set in a semigroup satisfying SFC must have positive Folner density. Known sufficient conditions include left cancellative and include a stronger condition than weakly right cancellative. In this talk we add to the list of sufficient conditions.

The presentations will be given via Zoom. The corresponding link is as follows

https://cua.zoom.us/j/87627066209?pwd=cWxxTlplVko5YitkbVo2V0crMXk3QT09

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