A Short Proof of a Generalised Conjecture of Erdős in Amenable Groups

Kai Prince

Table of contents

Abstract	2
Introduction	2
Preliminaries	2
Amenable Groups and Actions	2
Topological Dynamics of Group Actions	2
Recurrence Results & Ergodic Theorems	2
Erdős Cubes & Cubic Measures	2
Factor Maps	2
Key Dynamical Results	2
Proof of Theorem (ref)	2
Furstenberg's Correspondence Princple	2
Kronecker Factor	2
Choosing a point $x_1 \ldots \ldots \ldots \ldots \ldots$	2
The joining ν	2
Proof Conclusion	2
Proof of Corollary (ref)	2
Proof of Theorem (ref)	2
Discussion	2

Abstract

Introduction

Preliminaries

Amenable Groups and Actions

Topological Dynamics of Group Actions

Recurrence Results & Ergodic Theorems

Erdős Cubes & Cubic Measures

Factor Maps

Key Dynamical Results

Proof of Theorem (ref)

Furstenberg's Correspondence Princple

Kronecker Factor

Choosing a point x_1

The joining ν

Proof Conclusion

Proof of Corollary (ref)

Proof of Theorem (ref)

Discussion