

Andrzej Grzesik

Jagiellonian University

AN INTRODUCTION TO FLAG ALGEBRAS

The flag algebra method is a computer-assisted technique for deriving relationships between subgraph densities that yield tight bounds in a variety of graph theory problems. The method has become a central tool in modern extremal graph theory and has been used to solve or make substantial progress on many longstanding open problems. In this tutorial, we will learn how the flag algebra method works and how to apply it to a range of questions in graph theory.