

# Table of content

- 1 Introduction** **1**
- 1.1 Extremal Graph Theory . . . . . 1
- 1.2 Oriented Graphs . . . . . 2
- 1.3 Sketch of Proof . . . . . 4
  
- 2 Preliminaries** **7**
- 2.1 The Basics . . . . . 7
- 2.2 Diregularity . . . . . 8
  
- 3 Proofs** **11**
- 3.1 Auxiliary Lemmas . . . . . 11
- 3.1.1 Connected antimatchings . . . . . 11
- 3.1.2 Tree decomposition . . . . . 14
- 3.1.3 Partition . . . . . 16
- 3.2 Proving Theorem 1.9 . . . . . 19
- 3.3 Conclusions . . . . . 23
  
- Bibliography** **25**