COMS E6998-15: Algebraic Techniques in TCS (Fall'21)

September 14, 2021

Lecture 1: Algebraic Graph Algorithms

Instructor: Josh Alman

Scribes: YOUR NAME

1 Introduction

The class is about algebraic algorithms for graph problems...

2 Course Topics

• Matrix Multiplication

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3 Problem: All-Pairs Shortest Paths

In this problem, we have to...

Claim 1. $T(n) = O(n^{\log_2 7}).$

Proof. The proof is by induction...