LOGCONCAVE POLYNOMIALS 2: FPRAS MATROID BASE COUNTING REPORT

Instructor: Partha Mukhopadhyay

Soham Chatterjee, Saswata Mukherjee

Abstract

This is a report for the paper [ALGV19] which was covered in the second half of the course 'Expander Graphs and Its Application' instructed by Partha Mukhopadhyay in the Jan-May, 2024 semester in Chennai Mathematical Institute.

Contents

1	Preliminaries	 	•	•	 •	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	 •	•	•	•	•	•		 	•	•	•	•	3
2	References	 			 																																					_

1 Preliminaries

2 References

[ALGV19] Nima Anari, Kuikui Liu, Shayan Oveis Gharan, and Cynthia Vinzant. Log-concave polynomials II: high-dimensional walks and an FPRAS for counting bases of a matroid, 2019.