

CS 496 Lecture 16: Slow-Mixing Markov Chains II

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These notes are under construction! I will post them very soon.

The contents of this lecture are based on [LMR⁺24], which you can find here: <https://arxiv.org/pdf/2405.20849>, and the specific content covered was the application to proving that a Markov chain for the hardcore model finds a large independent set in triangle-free graphs, covered here: [LMR⁺24, Section 4].

References

- [LMR⁺24] Kuikui Liu, Sidhanth Mohanty, Prasad Raghavendra, Amit Rajaraman, and David X Wu. Locally stationary distributions: A framework for analyzing slow-mixing markov chains. In *2024 IEEE 65th Annual Symposium on Foundations of Computer Science (FOCS)*, pages 203–215. IEEE, 2024. 1