

CS5130 : Mathematical Tools for Theoretical Computer Science

(Scribe Lecture Notes)

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Preface

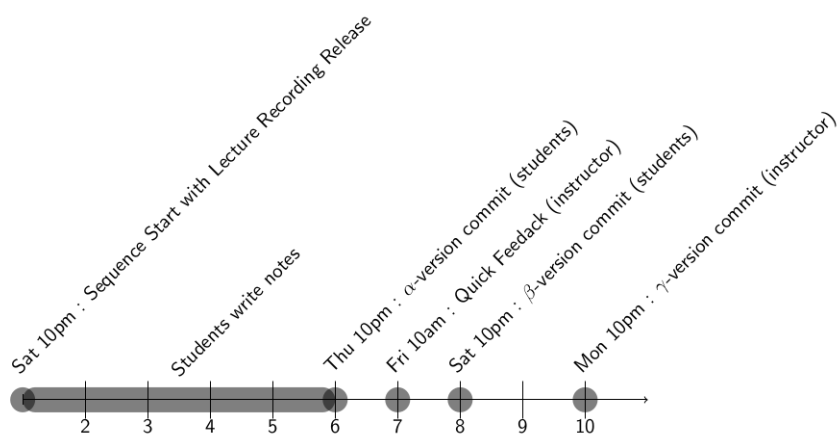
This lecture notes are produced as a part of the course CS5130: Mathematical Tools for Theoretical Computer Science which was a course offered (during the online semester Sep-Dec 2020) at the CSE Department of IIT Madras.

Acknowledgements

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Scribe status

Each lecture has a field called **status**. It tells which stage of the edit pipeline is the document currently. The scribe notes are due on Thursdays and Saturdays as per the following timeline.



Even after these edits, it is possible that there are still errors in the draft, which may not get noticed. If you find errors still, please report to the instructor.

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Todo list

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Status : β

Lecture 1

Pigeon Hole Principle and Basic Applications

1.1 Example 1

This is a test example lecture notes.

1.2 Example 2

1.3 Example 3

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Lecture 2

Pigeon Hole Principle - More Applications

2.1 Example 1

2.2 Example 2

2.3 Example 3