

Preliminary Plan for Differential Privacy PhD course

All references are to the text book: Dwork & Roth "The Algorithmic Foundations of Differential Privacy"

We meet at 08:30 on Mondays in building 322, ground floor.

Week	Date	Chapt.	Subject
1	22/10	1+2	Basic Terms
2	29/10	3.1 – 3.4	Basic Techniques
3	5/11	3.5 – 3.6	Composition Theorems etc.
4	12/11	4	Releasing Linear Queries with Correlated Error
5	19/11	5.1 – 5.2	Generalisations
6	26/11	5.3	Generalisations continued
7	03/12	6	Boosting for Queries
8	10/12	7	When Worst-Case Sensitivity is Atypical
9	17/12	8	Lower Bounds and Separation Results
Holiday Break			
10	07/01	9	Computational Complexity
11	14/01	10	Mechanism Design
12	21/01	11	Machine Learning
13	28/01	12	Additional Models