

Exercise Sheet 6

Complete before class on Tuesday, November 18th

Exercise 1. What is the treewidth of

- a. a complete graph,
- b. a complete bipartite graph,
- c. a forest,
- d. a cycle?

Exercise 2. Turn the tree decomposition from the lecture slides into a nice tree decomposition of the same width.

Exercise 3. By extending the approach from path decomposition, describe and analyze an FPT algorithm for Maximum Weight Independent Set parameterized by treewidth.