

LAK tutorials 8

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To pass the tutorials, you have to attend all tutorials and submit (solve) at least 50% of homework assignments. There are two types of homework assignments:

1. A-type: You have to finish this assignment if you do not attend the tutorials,
2. Star-type: Throughout the semester, you have to submit (solve) at least 50% of these homework assignments.

Please, submit your solutions in PDF format to cerny@kam.mff.cuni.cz.

A-type assignment

Exercise 1

Determine the spectrum of the complement of a k -regular graph.

Star-type assignment

Exercise 2

Let G be a graph on n vertices and A its adjacency matrix. What can we say about G if the matrix $A + A^2 + \dots + A^{n-1}$ has a zero non-diagonal entry?