

Algorithmic Game Theory

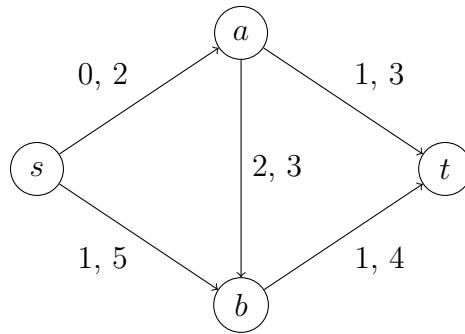
Summer Term 2024

Tutorial Session - Week 3

*You are supposed to work on these tasks in class together with your fellow students.
Please find groups of 2 or 3 students!*

Exercise 1:

Consider the following symmetric network congestion game with two players. State a *coarse-correlated equilibrium* that is not a pure or mixed Nash equilibrium.



Exercise 2:

Let p, p' be coarse correlated equilibria of a cost-minimization game Γ . Prove that any convex combination of the distributions p and p' yields also coarse correlated equilibrium of Γ (i.e., any distribution $q := \lambda p + (1 - \lambda)p'$ for a $\lambda \in [0, 1]$).