

## Algorithms and Uncertainty

Winter Term 2025/26

Tutorial Session - Week 11

### Exercise 1:

Show that every no-regret algorithm in the experts setting has to be randomized. Consider the case  $n = 2$  and for every deterministic algorithm construct a sequence such that  $L_{\text{Alg}}^{(T)} = T$  and  $\min_i L_i^{(T)} \leq \frac{T}{2}$ .