

Logic and Learning

TOSS 2026

Homework 2

hand-in deadline: Thursday, July 2nd at 23:59

Ex. 1 [Learning in the limit] Show that the epistemic space $(S, \mathcal{O})$ such that $S = \{s_i \mid i \in \mathbb{N}\}$ and $\mathcal{O} = \{O_i \mid i \in \mathbb{N}\}$, where for each $i \in \mathbb{N}$, $O_i = S \setminus \{s_i\}$ is learnable in the limit.

Ex. 2 [Lex vs Mini] Consider propositions p, q . Find a plausibility preorder on possible worlds over these propositions, such that after the on the sequence of inputs: $\neg p$ and $\neg q$, the methods *Mini* and *Lex* yield different beliefs, respectively.

Ex. 3 [Mini on positive and negative] Give an example of an epistemic space that is learnable by minimal revision from positive and negative data, but not from only positive data.