

# Seminar Logic, Hand-in exercise 4

March 4, 2024

**Exercise 1** [3 points] Show that the sequent rule

$$\frac{\Phi \vdash \psi}{\Phi, \Phi' \vdash \psi}$$

is derivable from the rules in table 2 on page 41 of Pitts' *Categorical Logic*.

**Exercise 2** [7 points] Show that in Example 5.2.3, the “inclusive” subsets of a Cpo are the closed sets of a topology.