定理4: $\vdash_{PC} (B \to C) \to ((A \to B) \to (A \to C))$ 加前件定理

证明:

1 $(A \to (B \to C)) \to ((A \to B) \to (A \to C))$ A_2

2 $((A \to (B \to C)) \to ((A \to B) \to (A \to C)))$
$\to ((B \to C) \to ((A \to (B \to C)) \to ((A \to B) \to (A \to C))))$ A_1

3 $(B \to C) \to ((A \to (B \to C)) \to ((A \to B) \to (A \to C)))$ $(1)(2)r_{mp}$

4 $((B \to C) \to ((A \to (B \to C)) \to ((A \to B) \to (A \to C))))$ A_2
$\to (((B \to C) \to (A \to (B \to C))) \to ((B \to C) \to ((A \to B) \to (A \to C))))$

5 $((B \to C) \to (A \to (B \to C))) \to ((B \to C) \to ((A \to B) \to (A \to C)))$

6 $(B \to C) \to (A \to (B \to C))$ A_1 $(3)(4)r_{mp}$

7 $(B \to C) \to ((A \to B) \to (A \to C))$ $(6)(5)r_{mp}$