定理2 如果 $\vdash_{PC} A \to (B \to C)$ 那么 $\vdash_{PC} B \to (A \to C)$

证明:

1 A_1

2 A_2

⋮

(m) $A \to (B \to C)$ $(= A_m)$

(m+1) $(A \to (B \to C)) \to ((A \to B) \to (A \to C))$ 公理2

(m+2) $(A \to B) \to (A \to C)$ (m)与(m+1)用分离规则导出

(m+3) $((A \to B) \to (A \to C)) \to (B \to ((A \to B) \to (A \to C)))$ 公理1

(m+4) $B \to ((A \to B) \to (A \to C))$ (m+2)与(m+3)用分离规则导出

(m+5) $(B \to ((A \to B) \to (A \to C))) \to ((B \to (A \to B)) \to (B \to (A \to C)))$ 公理2

(m+6) $(B \to (A \to B)) \to (B \to (A \to C))$ (m+4)与(m+5)用分离规则导出

(m+7) $B \to (A \to B)$ 公理1

(m+8) $B \to (A \to C)$ (m+7)与(m+6)用分离规则导出