

$$\begin{array}{c}
\frac{}{A}^1 \quad \frac{(A \rightarrow B) \wedge (B \rightarrow C)}{A \rightarrow B} \wedge E_l \quad \frac{(A \rightarrow B) \wedge (B \rightarrow C)}{B \rightarrow C} \wedge E_r \\
\hline
\frac{B}{B} \rightarrow E \quad \frac{C}{A \rightarrow C} 1 \rightarrow I
\end{array}$$