

1°.

$$\begin{aligned}
f|_A \in C(I_A \circ \mu \circ I_A; \nu) &\Leftrightarrow \\
f|_A \circ I_A \circ \mu \circ I_A \sqsubseteq \nu \circ f|_A &\Leftrightarrow \\
f \circ I_A \circ I_A \circ \mu \circ I_A \sqsubseteq \nu \circ f|_A &\Leftrightarrow \\
f \circ I_A \circ \mu \circ I_A \sqsubseteq \nu \circ f \circ I_A &\Leftarrow \\
f \circ I_A \circ \mu \sqsubseteq \nu \circ f &\Leftarrow \\
f \circ \mu \sqsubseteq \nu \circ f &\Leftrightarrow \\
f \in C(\mu; \nu). &
\end{aligned}$$

2°.

$$\begin{aligned}
f|_A \in C'(I_A \circ \mu \circ I_A; \nu) &\Leftrightarrow \\
I_A \circ \mu \circ I_A \sqsubseteq (f|_A)^\dagger \circ \nu \circ f|_A &\Leftarrow \\
I_A \circ \mu \circ I_A \sqsubseteq (f \circ I_A)^\dagger \circ \nu \circ f \circ I_A &\Leftrightarrow \\
I_A \circ \mu \circ I_A \sqsubseteq I_A \circ f^\dagger \circ \nu \circ f \circ I_A &\Leftarrow \\
\mu \sqsubseteq f^\dagger \circ \nu \circ f &\Leftrightarrow \\
f \in C'(\mu; \nu). &
\end{aligned}$$

3°.

$$\begin{aligned}
f|_A \in C''(I_A \circ \mu \circ I_A; \nu) &\Leftrightarrow \\
f|_A \circ I_A \circ \mu \circ I_A \circ (f|_A)^\dagger \sqsubseteq \nu &\Leftrightarrow \\
f \circ I_A \circ I_A \circ \mu \circ I_A \circ I_A \circ f^\dagger \sqsubseteq \nu &\Leftrightarrow \\
f \circ I_A \circ \mu \circ I_A \circ f^\dagger \sqsubseteq \nu &\Leftarrow \\
f \circ \mu \circ f^\dagger \sqsubseteq \nu &\Leftrightarrow \\
f \in C''(\mu; \nu). &
\end{aligned}$$

□