

es-pstar-q_functionality_wrt_iff^{11,40}

$$\begin{aligned}
& \forall es:ES, e_1:E, e_2:\{e:E \mid \text{loc}(e) = \text{loc}(e_1) \in \text{Id}\}, p, q, p', \\
& \quad q':(\{e:E \mid \text{loc}(e) = \text{loc}(e_1) \in \text{Id}\} \rightarrow \{e:E \mid \text{loc}(e) = \text{loc}(e_1) \in \text{Id}\} \rightarrow \mathbb{P}). \\
& (\forall a, b:\{e:E \mid \text{loc}(e) = \text{loc}(e_1) \in \text{Id}\} . \\
& (a \in [e_1, e_2]) \Rightarrow (b \in [e_1, e_2]) \Rightarrow (p(a,b) \iff p'(a,b))) \\
& \Rightarrow (\forall a, b:\{e:E \mid \text{loc}(e) = \text{loc}(e_1) \in \text{Id}\} . \\
& (a \in [e_1, e_2]) \Rightarrow (b \in [e_1, e_2]) \Rightarrow (q(a,b) \iff q'(a,b))) \\
& \Rightarrow ([e_1;e_2] \sim ([a,b].p(a,b)) * [a,b].q(a,b) \iff [e_1;e_2] \sim ([a,b].p'(a,b)) * [a,b].q'(a,b))
\end{aligned}$$