

causal_order_transitivity^{4,23}

$\forall T:\text{Type}, L:T \text{ List}, R:(\mathbb{N}_{<\|L\|} \rightarrow \mathbb{N}_{<\|L\|} \rightarrow \text{Prop}), P_1, P_2, P_3:(\mathbb{N}_{<\|L\|} \rightarrow \text{Prop}).$
(Trans 1,2: $\mathbb{N}_{<\|L\|}. R(1,2)$)
 $\Rightarrow \text{causal_order}(L;R;P_1;P_2)$
 $\Rightarrow \text{causal_order}(L;R;P_2;P_3)$
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