

es-causl^{11,40}

$\text{es-causl}(es; e; e') \equiv_{\text{def}} e < e'$

clarification:

$\text{es-causl}(es; e; e') \equiv_{\text{def}} \text{cless}(\text{es-E}(es); \text{es-pred?}(es); \text{es_info}(es); e; e')$