

## generated-thread-binrel-properties2<sup>11,40</sup>

$\forall es:ES, P:(E \rightarrow \mathbb{P}), R:(E \rightarrow E \rightarrow \mathbb{P}).$

single-thread-generator{i:l}(es;P;R)

$\Rightarrow (\forall e, e':E. (R(e,e') \Rightarrow (P(e) \ \& \ P(e'))))$

$\Rightarrow (\text{connex}(\{e:E \mid P(e)\};R^*)$

$c \wedge (R^+ \mid P \iff \{E\} \ x,y:E. (x < y) \mid P)$

$c \wedge (R \iff \{E\} \ R^+ \mid)$

$c \wedge (\forall x, y, x', y':E. (R^+(x,y) \Rightarrow (R(y',y) \Rightarrow ((R^*)(x,y'))))$

$c \wedge (\forall x, y, x', y':E. (R^+(x,y) \Rightarrow (R(x',x) \Rightarrow (R(y',y) \Rightarrow (R^+(x',y')))))$