

## generated-thread-properties<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)

$\Rightarrow ((\forall e, e':E. P(e) \Rightarrow P(e') \Rightarrow (((e \hat{R} + e') \vee (e = e')) \vee (e' \hat{R} + e)))$

$c \wedge (\forall x, y:E. (P(x) \ \& \ P(y)) \Rightarrow ((\hat{R} + (x,y)) \iff (x < y)))$

$c \wedge (\forall x, y:E. (R|P^+ + (x,y)) \iff (R^+ | P(x,y)))$

$c \wedge (\forall x, y:E. (R|P(x,y)) \iff (R|P^+ + ! (x,y)))$

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

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