Inference at $*$ 1
of proof for Lemma anti_sym_functionality_wrt_iff:

1. T : Type
2. R : $T \to T \to \mathbb{P}$
3. R' : $T \to T \to \mathbb{P}$
4. $\forall x, y{:}T.\ R(x,y) \iff R'(x,y)$

$\vdash (\forall x, y{:}T.\ R'(x,y) \Rightarrow R'(y,x) \Rightarrow (x = y)) \iff (\forall x, y{:}T.\ R'(x,y) \Rightarrow R'(y,x) \Rightarrow (x = y))$

by ((RelRST)
CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
)) (first_tok :t) inil_term)))·

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_80836_{anti_sym_functionality_wrt_iff}1.html