

Inference at \*  
of proof for Lemma implies\_antisymmetry:

```
⊢∀P,Q:ℙ. (P ⇒ Q) ⇒ (Q ⇒ P) ⇒ (P ⇔ Q)
  by ((HypBackchain
    CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n
      ),(first_nat 3:n)) (first_tok :t) inil_term))))).
```