

Inference at *
of proof for Lemma quot_elim:

$\vdash \forall T:\text{Type}, E:(T \rightarrow T \rightarrow \mathbb{P}). \text{EquivRel}(T;x,y.E(x,y)) \Rightarrow (\forall a, b:T. (a = b) \iff (\downarrow E(a,b)))$
by ((GenUnivCD)
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat
3:n)) (first_tok :t) inil_term))).

1:

1. $T : \text{Type}$
 2. $E : T \rightarrow T \rightarrow \mathbb{P}$
 3. $\text{EquivRel}(T;x,y.E(x,y))$
 4. $a : T$
 5. $b : T$
 6. $a = b$
- $\vdash \downarrow E(a,b)$

2:

1. $T : \text{Type}$
 2. $E : T \rightarrow T \rightarrow \mathbb{P}$
 3. $\text{EquivRel}(T;x,y.E(x,y))$
 4. $a : T$
 5. $b : T$
 6. $\downarrow E(a,b)$
- $\vdash a = b$

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