```
ext_simp_1  THM

⊢  ∀'a,'b:Type, f,g:('a→'b).
|  (λx:'a. f(x)) = (λx:'a. g(x)) ⟺ (∀x:'a. f(x) = g(x))
| by Id THEN StrongAuto
|
|\
| 1. 'a : Type
| 2. 'b : Type
| 3. f : 'a→'b
| 4. g : 'a→'b
| 5. (λx:'a. f(x)) = (λx:'a. g(x))
| 6. x : 'a
| ⊢  f(x) = g(x)
|   by ApplyFunToHypEquands (λf:'a→'b. f(x)) 5 THEN All Reduce
|      THEN
|      StrongAuto
|
.\
. 1. 'a : Type
. 2. 'b : Type
. 3. f : 'a→'b
. 4. g : 'a→'b
. 5. ∀x:'a. f(x) = g(x)
. ⊢  (λx:'a. f(x)) = (λx:'a. g(x))  by Analyze THEN StrongAuto
. |
. .....subterm .....
. 1. 'a : Type
. 2. 'b : Type
. 3. f : 'a→'b
. 4. g : 'a→'b
. 5. ∀x:'a. f(x) = g(x)
. 6. x : 'a
. ⊢  f(x) = g(x)  by BackThru 5 THEN StrongAuto
END
```