

## Agatha Murder Puzzle (JProver)Lori2<sup>8,37</sup>

Agatha hates Charles & Agatha hates Agatha  
& ( $\forall p:\text{Person. } \neg p \text{ is richer than Agatha} \Rightarrow \text{The Butler hates } p$ )  
& ( $\forall p:\text{Person. } \text{Agatha hates } p \Rightarrow \neg \text{Charles hates } p$ )  
& ( $\forall p:\text{Person. } \text{Agatha hates } p \Rightarrow \text{The Butler hates } p$ )  
& ( $\forall p:\text{Person. } p \text{ likes Agatha} \vee p \text{ likes The Butler} \vee p \text{ likes Charles}$ )  
& ( $\forall p, q:\text{Person. } p \text{ kills } q \Rightarrow \neg p \text{ is richer than } q$ )  
& ( $\forall p, q:\text{Person. } p \text{ kills } q \Rightarrow p \text{ hates } q$ )  
 $\Rightarrow$  The Butler did not kill Agatha & Charles did not kill Agatha

ProofTree