# t55_quaterni (TMd8bYB1GHu38a98ME4Lr12Ns9kFK1cR3Vk)

October 27, 2020

Let $v1\_quaterni : \iota \Rightarrow o$ be given. Let $k31\_quaterni : \iota \Rightarrow \iota$ be given. Let $k28\_quaterni : \iota \Rightarrow \iota$ be given. Let $k17\_quaterni : \iota \Rightarrow \iota$ be given. Let $k18\_quaterni : \iota \Rightarrow \iota$ be given. Let $k1\_real\_1 : \iota \Rightarrow \iota$ be given. Let $k19\_quaterni : \iota \Rightarrow \iota$ be given. Let $k20\_quaterni : \iota \Rightarrow \iota$ be given. Let $k8\_quaterni : \iota \Rightarrow \iota$ be given. Let $k26\_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k23\_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k25\_quaterni : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xcmplx\_0 : \iota$ be given. Let $k11\_quaterni : \iota$ be given. Let $k12\_quaterni : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_quaterni : \iota$ be given. Assume the following.

$$\forall X0.(v1\_quaterni\ X0) \Rightarrow ((k17\_quaterni\ (k31\_quaterni\ X0) = k17\_quaterni\ X0) \wedge ((k18\_quaterni\ (k31\_quaterni\ X0) = k1\_real\_1\ (k18\_quaterni\ X0)) \wedge ((k19\_quaterni\ (k31\_quaterni\ X0) = k1\_real\_1\ (k19\_quaterni\ X0)) \wedge (k20\_quaterni\ (k31\_quaterni\ X0) = k1\_real\_1\ (k20\_quaterni\ X0))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_quaterni\ X0) \Rightarrow ((k17\_quaterni\ (k28\_quaterni\ X0) = k1\_real\_1\ (k17\_quaterni\ X0)) \wedge ((k18\_quaterni\ (k28\_quaterni\ X0) = k1\_real\_1\ (k18\_quaterni\ X0)) \wedge ((k19\_quaterni\ (k28\_quaterni\ X0) = k1\_real\_1\ (k19\_quaterni\ X0)) \wedge (k20\_quaterni\ (k28\_quaterni\ X0) = k1\_real\_1\ (k20\_quaterni\ X0))))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_quaterni\ X0) \Rightarrow (k28\_quaterni\ X0 = k8\_quaterni\ X0) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_quaterni\ X0) \Rightarrow (k28\_quaterni\ X0 = k26\_quaterni\ (k26\_quaterni\ (k23\_quaterni\ (k1\_real\_1\ (k17\_quaterni\ X0))\ (k25\_quaterni\ (k1\_real\_1\ (k18\_quaterni\ X0))\ k1\_xcmplx\_0))\ (k25\_quaterni\ (k1\_real\_1\ (k19\_quaterni\ X0))\ k11\_quaterni))\ (k25\_quaterni\ (k1\_real\_1\ (k20\_quaterni\ X0))\ k12\_quaterni)) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_quaterni\ X0) \Rightarrow (k28\_quaterni\ (k28\_quaterni\ X0) = X0) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_quaterni\ X0) \Rightarrow (v1\_quaterni\ (k8\_quaterni\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_quaterni\ X0) \Rightarrow (m1\_subset\_1\ (k31\_quaterni\ X0)\ k1\_quaterni) \tag{7}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_quaterni) \Rightarrow (v1\_quaterni\ X0) \tag{8}$$

**Theorem 1**

$$\forall X0.(v1\_quaterni\ X0) \Rightarrow (k31\_quaterni\ (k28\_quaterni\ X0) = k28\_quaterni\ (k31\_quaterni\ X0))$$