

t38\_quatern2  
(TMMCr9T2Pq5NbPnGxpbiU41HqRkPJ4WWYx9)

October 27, 2020

Let  $k1\_group\_1 : \iota \Rightarrow \iota$  be given. Let  $k16\_quatern2 : \iota$  be given. Let  $k2\_quatern2 : \iota$  be given. Let  $k5\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v4\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $l4\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v36\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l6\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l2\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l5\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l4\_struct\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$k5\_struct\_0 \ k16\_quatern2 = k2\_quatern2 \quad (1)$$

Assume the following.

$$\forall X0. ((\neg v2\_struct\_0 \ X0) \wedge ((v4\_vectsp\_1 \ X0) \wedge (l4\_algstr\_0 \ X0))) \Rightarrow (k1\_group\_1 \ X0 = k5\_struct\_0 \ X0) \quad (2)$$

Assume the following.

$$(v36\_algstr\_0 \ k16\_quatern2) \wedge (v4\_vectsp\_1 \ k16\_quatern2) \quad (3)$$

Assume the following.

$$(\neg v2\_struct\_0 \ k16\_quatern2) \wedge (v36\_algstr\_0 \ k16\_quatern2) \quad (4)$$

Assume the following.

$$\forall X0. (l6\_algstr\_0 \ X0) \Rightarrow ((l2\_algstr\_0 \ X0) \wedge (l5\_algstr\_0 \ X0)) \quad (5)$$

Assume the following.

$$\forall X0. (l5\_algstr\_0 \ X0) \Rightarrow ((l4\_algstr\_0 \ X0) \wedge (l4\_struct\_0 \ X0)) \quad (6)$$

Assume the following.

$$(v36\_algstr\_0 \ k16\_quatern2) \wedge (l6\_algstr\_0 \ k16\_quatern2) \quad (7)$$

**Theorem 1**  $k1\_group\_1 \ k16\_quatern2 = k2\_quatern2$ .