t2_fintopo6 (TMZzSCdJHU9fsiSYyZXtPZsRMJPoA9Baa7r)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $k9\_fin\_topo : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_fin\_topo : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_orders\_2\ X0)) \Rightarrow (\forall X1.\ (m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow ((X1 \in k9\_fin\_topo\ X0\ X2) \Leftrightarrow (\neg r1\_xboole\_0\ (k1\_fin\_topo\ X0\ X1)\ X2)))) \tag{1}$$

Assume the following.

$$\forall X0.r1\_xboole\_0\ X0\ k1\_xboole\_0 \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow (\neg(X1 \neq k1\_xboole\_0) \wedge (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow (\neg X2 \in X1))) \tag{3}$$

Assume the following.

$$\forall X0.m1\_subset\_1\ k1\_xboole\_0\ (k1\_zfmisc\_1\ X0) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow (l1\_struct\_0\ X0) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0) \wedge (l1\_orders\_2\ X0)) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow (m1\_subset\_1\ (k9\_fin\_topo\ X0\ X1)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{6}$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0) \Rightarrow (k1\_struct\_0\ X0 = k1\_xboole\_0) \tag{7}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_orders\_2\ X0)) \Rightarrow (k9\_fin\_topo\ X0\ (k1\_struct\_0\ X0) = k1\_xboole\_0)$$