t86_cohsp_1 (TMTti27pWK8U8MXxFK6MUApgRvoyYoLSxaj)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_classes1 : \iota \Rightarrow o$ be given. Let $v1\_coh\_sp : \iota \Rightarrow o$ be given. Let $k14\_cohsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16\_cohsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k14\_cohsp\_1\ X0\ X1 = k14\_cohsp\_1\ X2\ X3) \Leftrightarrow ((X0 = X2) \wedge (X1 = X3)) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{4}$$

Assume the following.

$$\exists X0.v1\_xboole\_0\ X0 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_xboole\_0\ X0\ X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \tag{6}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge ((v1\_classes1\ X0) \wedge (v1\_coh\_sp\ X0))) \Rightarrow (\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((v1\_classes1\ X1) \wedge (v1\_coh\_sp\ X1))) \Rightarrow (k16\_cohsp\_1\ X0\ X1 = k2\_xboole\_0\ (ReplSep\ (toset\ (\lambda X2 : \iota.m1\_subset\_1\ X2\ X0))\ (\lambda X2 : \iota.True)\ (\lambda X2 : \iota.k14\_cohsp\_1\ X2\ k1\_xboole\_0))\ (ReplSep\ (toset\ (\lambda X2 : \iota.m1\_subset\_1\ X2\ X1))\ (\lambda X2 : \iota.True)\ (\lambda X2 : \iota.k14\_cohsp\_1\ k1\_xboole\_0\ X2)))) \tag{7}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((v1\_classes1\ X0)\wedge(v1\_coh\_sp\ X0)))\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v1\_classes1\ X1)\wedge(v1\_coh\_sp\ X1)))\Rightarrow(\forall X2.\forall X3.(k14\_cohsp\_1\ X2\ X3\in k16\_cohsp\_1\ X0\ X1)\Leftrightarrow(((X2\in X0)\wedge(X3=k1\_xboole\_0))\vee((X2=k1\_xboole\_0)\wedge(X3\in X1)))))$$