t58_cohsp_1 (TMXx2mWpE3yHpaHCSdjUQcGiCSxQgTNvpnK)

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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 $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v10\_cohsp\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11\_cohsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k3\_tarski : \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X2)) \wedge (v1\_xboole\_0\ X2)) \tag{2}$$

Assume the following.

$$\forall X0.\exists X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \wedge (v1\_xboole\_0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge ((v1\_classes1\ X0) \wedge (v1\_coh\_sp\ X0))) \Rightarrow (\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((v1\_classes1\ X1) \wedge (v1\_coh\_sp\ X1))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k3\_tarski\ X0)\ (k3\_tarski\ X1))))) \Rightarrow (\neg(\forall X3.\forall X4.(k2\_tarski\ X3\ X4 \in X0) \Rightarrow (\forall X5.\forall X6.((k4\_tarski\ X3\ X5 \in X2) \wedge (k4\_tarski\ X4\ X6 \in X2)) \Rightarrow (k2\_tarski\ X5\ X6 \in X1))) \wedge ((\forall X3.\forall X4.(k2\_tarski\ X3\ X4 \in X0) \Rightarrow (\forall X5.((k4\_tarski\ X3\ X5 \in X2) \wedge (k4\_tarski\ X4\ X5 \in X2)) \Rightarrow (X3 = X4))) \wedge (\forall X3.((v1\_funct\_1\ X3) \wedge ((v1\_funct\_2\ X3\ X0\ X1) \wedge ((v10\_cohsp\_1\ X3) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))))) \Rightarrow (\neg(X2 = k11\_cohsp\_1\ X0\ X1\ X3) \wedge (\forall X4.(m1\_subset\_1\ X4\ X0) \Rightarrow (k3\_funct\_2\ X0\ X1\ X3\ X4 = k7\_relat\_1\ X2\ X4)))))))) \tag{4}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((v1\_classes1\ X0)\wedge(v1\_coh\_sp\ X0)))\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v1\_classes1\ X1)\wedge(v1\_coh\_sp\ X1)))\Rightarrow(\exists X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X0\ X1)\wedge((v10\_cohsp\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))))\wedge(k11\_cohsp\_1\ X0\ X1\ X2 = k1\_xboole\_0)))$$