t43_coh_sp (TMG6hRw2MhUKmhpGu8cbhyeuG28oBLvfcU6)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k20\_coh\_sp : \iota \Rightarrow \iota$ be given. Let $k17\_coh\_sp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k22\_coh\_sp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k21\_coh\_sp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k2\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18\_coh\_sp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19\_coh\_sp : \iota \Rightarrow \iota$ be given. Let $k16\_coh\_sp : \iota \Rightarrow \iota$ be given. Let $k1\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k20\_coh\_sp\ X0)) \Rightarrow (X1 = k4\_tarski\ (k4\_tarski\ (k21\_coh\_sp\ X0\ X1)\ (k22\_coh\_sp\ X0\ X1))\ (k2\_xtuple\_0\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k20\_coh\_sp\ X0)) \Rightarrow (\exists X2.(m1\_subset\_1\ X2\ (k19\_coh\_sp\ X0)) \wedge (\exists X3.(m1\_subset\_1\ X3\ (k16\_coh\_sp\ X0)) \wedge (\exists X4.(m1\_subset\_1\ X4\ (k16\_coh\_sp\ X0)) \wedge ((X1 = k4\_tarski\ (k4\_tarski\ X3\ X4)\ X2) \wedge (((k17\_coh\_sp\ X0\ X4 = k1\_xboole\_0) \Rightarrow (k17\_coh\_sp\ X0\ X3 = k1\_xboole\_0)) \wedge (((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ (k17\_coh\_sp\ X0\ X3)\ (k17\_coh\_sp\ X0\ X4)) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k17\_coh\_sp\ X0\ X3)\ (k17\_coh\_sp\ X0\ X4)))))) \wedge (\forall X5.\forall X6.(k4\_tarski\ X5\ X6 \in k18\_coh\_sp\ X0\ X3) \Rightarrow (k4\_tarski\ (k1\_funct\_1\ X2\ X5)\ (k1\_funct\_1\ X2\ X6) \in k18\_coh\_sp\ X0\ X4))))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k16\_coh\_sp\ X0)) \Rightarrow (k18\_coh\_sp\ X0\ X1 = k1\_xtuple\_0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xtuple\_0\ (k4\_tarski\ X0\ X1) = X1 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.\\ (k4\_tarski\ (k4\_tarski\ X0\ X2)\ X4 = k4\_tarski\ (k4\_tarski\ X1\ X3)\ X5) \Rightarrow \\ ((X0 = X1) \wedge (X2 = X3)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k20\_coh\_sp\ X0)) \Rightarrow ((v1\_relat\_1\\ (k2\_xtuple\_0\ X1)) \wedge (v1\_funct\_1\ (k2\_xtuple\_0\ X1))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k20\_coh\_sp\ X0)) \Rightarrow (m1\_subset\_1\\ (k22\_coh\_sp\ X0\ X1)\ (k16\_coh\_sp\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k20\_coh\_sp\ X0)) \Rightarrow (k22\_coh\_sp\\ X0\ X1 = k2\_xtuple\_0\ (k1\_xtuple\_0\ X1)) \tag{8}$$

Theorem 1

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k20\_coh\_sp\ X0)) \Rightarrow ((\neg (k17\_coh\_sp\\ X0\ (k22\_coh\_sp\ X0\ X1) = k1\_xboole\_0) \wedge (k17\_coh\_sp\ X0\ (k21\_coh\_sp\\ X0\ X1) \neq k1\_xboole\_0)) \wedge (((v1\_funct\_1\ (k2\_xtuple\_0\ X1)) \wedge ((v1\_funct\_2\\ (k2\_xtuple\_0\ X1)\ (k17\_coh\_sp\ X0\ (k21\_coh\_sp\ X0\ X1))\ (k17\_coh\_sp\\ X0\ (k22\_coh\_sp\ X0\ X1))) \wedge (m1\_subset\_1\ (k2\_xtuple\_0\ X1)\ (k1\_zfmisc\_1\\ (k2\_zfmisc\_1\ (k17\_coh\_sp\ X0\ (k21\_coh\_sp\ X0\ X1))\ (k17\_coh\_sp\ X0\\ (k22\_coh\_sp\ X0\ X1)))))))) \wedge (\forall X2.\forall X3.(k4\_tarski\ X2\\ X3 \in k18\_coh\_sp\ X0\ (k21\_coh\_sp\ X0\ X1)) \Rightarrow (k4\_tarski\ (k1\_funct\_1\ (\\ k2\_xtuple\_0\ X1)\ X2)\ (k1\_funct\_1\ (k2\_xtuple\_0\ X1)\ X3) \in k18\_coh\_sp\\ X0\ (k22\_coh\_sp\ X0\ X1)))))$$