

t38_cohsp_1

(TMb7pJVQvohFrFVb9PRKGYixe6RKMzprU25)

October 27, 2020

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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k1_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v9_cohsp_1 : \iota \Rightarrow o$ be given. Let $k8_cohsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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. Let $k3_cohsp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_classes1 X0) \wedge (v1_coh_sp \\
 & X0))) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v1_classes1 X1) \wedge (v1_coh_sp \\
 & X1))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & X0 (k3_tarski X1)))) \Rightarrow (\neg (\forall X3.(X3 \in X2) \Rightarrow (v1_finset_1 (k1_xtuple_0 \\
 & X3)))) \wedge ((\forall X3.(m1_subset_1 X3 X0) \Rightarrow (\forall X4.(m1_subset_1 \\
 & X4 X0) \Rightarrow ((k2_xboole_0 X3 X4 \in X0) \Rightarrow (\forall X5.\forall X6.((k4_tarski \\
 & X3 X5 \in X2) \wedge (k4_tarski X4 X6 \in X2)) \Rightarrow (k2_tarski X5 X6 \in X1)))))) \wedge ((\forall X3. \\
 & (m1_subset_1 X3 X0) \Rightarrow (\forall X4.(m1_subset_1 X4 X0) \Rightarrow ((k2_xboole_0 \\
 & X3 X4 \in X0) \Rightarrow (\forall X5.((k4_tarski X3 X5 \in X2) \wedge (k4_tarski X4 X5 \in \\
 & X2)) \Rightarrow (X3 = X4)))))) \wedge (\forall X3.((v1_funct_1 X3) \wedge ((v1_funct_2 \\
 & X3 X0 X1) \wedge ((v9_cohsp_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & X0 X1)))))) \Rightarrow (\neg (X2 = k8_cohsp_1 X0 X1 X3) \wedge (\forall X4.(m1_subset_1 \\
 & X4 X0) \Rightarrow (k3_funct_2 X0 X1 X3 X4 = k7_relat_1 X2 (k3_cohsp_1 X0 X4)))))))))
 \end{aligned}$$

(1)

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_classes1 X0) \wedge (v1_coh_sp \\ & X0))) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v1_classes1 X1) \wedge (v1_coh_sp \\ & X1))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 (k3_tarski X1)))) \Rightarrow (\neg(\forall X3.(X3 \in X2) \Rightarrow (v1_finset_1 (k1_xtuple_0 \\ & X3)))) \wedge ((\forall X3.(m1_subset_1 X3 X0) \Rightarrow (\forall X4.(m1_subset_1 \\ & X4 X0) \Rightarrow ((k2_xboole_0 X3 X4 \in X0) \Rightarrow (\forall X5.\forall X6.((k4_tarski \\ & X3 X5 \in X2) \wedge (k4_tarski X4 X6 \in X2)) \Rightarrow (k2_tarski X5 X6 \in X1)))))) \wedge ((\forall X3. \\ & (m1_subset_1 X3 X0) \Rightarrow (\forall X4.(m1_subset_1 X4 X0) \Rightarrow ((k2_xboole_0 \\ & X3 X4 \in X0) \Rightarrow (\forall X5.((k4_tarski X3 X5 \in X2) \wedge (k4_tarski X4 X5 \in \\ & X2)) \Rightarrow (X3 = X4)))))) \wedge (\forall X3.((v1_funct_1 X3) \wedge ((v1_funct_2 \\ & X3 X0 X1) \wedge ((v9_cohsp_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1)))))) \Rightarrow (X2 \neq k8_cohsp_1 X0 X1 X3)))))) \end{aligned}$$