

t84_cohsp_1
(TMJF9262w4SGZ5uQt2j5HgKgCLtBbPZbkb7)

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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 $k15_cohsp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_classes1 X0) \wedge (v1_coh_sp \\ & X0))) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v1_classes1 X1) \wedge (v1_coh_sp \\ & X1))) \Rightarrow (\forall X2.(X2 \in k15_cohsp_1 X0 X1) \Leftrightarrow (\exists X3.(m1_subset_1 \\ & X3 X0) \wedge (\exists X4.(m1_subset_1 X4 X1) \wedge (X2 = k14_cohsp_1 X3 X4)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (k14_cohsp_1 X0 X1 = k14_cohsp_1 X2 X3) \Leftrightarrow ((X0 = X2) \wedge (X1 = X3)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_classes1 X0) \wedge (v1_coh_sp \\ & X0))) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v1_classes1 X1) \wedge (v1_coh_sp \\ & X1))) \Rightarrow (\forall X2. \forall X3. (k14_cohsp_1 X2 X3 \in k15_cohsp_1 \\ & X0 X1) \Leftrightarrow ((X2 \in X0) \wedge (X3 \in X1)))) \end{aligned}$$