

t2_coh_sp
(TMdiDDX8hFNas116he754Hu9p9tV7tG2JuN)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $v1_classes1 : \iota \Rightarrow o$ be given. Let $v1_coh_sp : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (\forall X2. (X2 \in X0) \Rightarrow (r1_tarski X2 X1)) \Rightarrow (r1_tarski (k3_tarski X0) X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_tarski X1 X2)) \Rightarrow (r1_tarski X0 X2) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (6)$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (7)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k1_zfmisc_1 X0) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1_coh_sp X0) \Leftrightarrow (\forall X1. ((r1_tarski X1 X0) \wedge (\forall X2. \\ \forall X3. ((X2 \in X1) \wedge (X3 \in X1)) \Rightarrow (k2_xboole_0 X2 X3 \in X0))) \Rightarrow (k3_tarski \\ X1 \in X0)) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0. (v1_classes1 X0) \Leftrightarrow (\forall X1. \forall X2. ((X1 \in X0) \wedge (r1_tarski X2 X1)) \Rightarrow (X2 \in X0)) \quad (10)$$

Theorem 1

$$\forall X0. (\neg v1_xboole_0 (k9_setfam_1 X0)) \wedge ((v1_classes1 (k9_setfam_1 X0)) \wedge (v1_coh_sp (k9_setfam_1 X0)))$$