

t22_sppol_1

(TMdET6JQEEfoMu69xgyr3k7uiQnr78VHeAN)

October 27, 2020

Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k2_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_zfmisc_1 : \iota \Rightarrow o$ be given. Let $v1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \neg (X0 \in X1) \wedge ((m1_subset_1 X1 (k1_zfmisc_1 X2)) \wedge (v1_xboole_0 X2)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (3)$$

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.

$$\forall X0. \forall X1. (\forall X2. (X2 \in X0) \Leftrightarrow (X2 \in X1)) \Rightarrow (X0 = X1) \quad (5)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0 : \iota \Rightarrow o. \forall X1 : \iota \Rightarrow \iota \Rightarrow \iota. \forall X2. \forall X3. \\ & (m2_finseq_1 X3 X2) \Rightarrow (v1_finset_1 (ReplSep (toset (\lambda X4 : \iota. \\ & m2_subset_1 X4 k1_numbers k5_numbers)) (\lambda X4 : \iota. (r1_xxreal_0 \\ & np_1 X4) \wedge ((r1_xxreal_0 X4 (k3_finseq_1 X3)) \wedge (X0 X4))) (\lambda X4 : \\ & \iota. X1 X3 X4))) \end{aligned} \quad (7)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_zfmisc_1 X0) \Rightarrow (\exists X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ & X0)) \wedge ((\neg v1_xboole_0 X1) \wedge ((v1_zfmisc_1 X1) \wedge (v1_subset_1 X1 X0)))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0. \exists X1. m1_subset_1 X1 X0 \quad (10)$$

Assume the following.

$$\forall X0. (\neg v1_finset_1 X0) \Rightarrow (\neg v1_zfmisc_1 X0) \quad (11)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (v1_finset_1 (ReplSep (toset (\lambda X1 : \iota. m2_subset_1 X1 k1_numbers \\ & k5_numbers)) (\lambda X1 : \iota. (r1_xxreal_0 np_1 X1) \wedge (r1_xxreal_0 \\ & X1 (k3_finseq_1 X0))) (\lambda X1 : \iota. k2_topreal1 np_2 X0 X1))) \end{aligned}$$