

t24_toler_1

(TMQ1FJMdD1DcLZkDRy51GVZBXjo6bAuz5yy)

October 27, 2020

Let $v1_relat_2 : \iota \Rightarrow o$ be given. Let $v3_relat_2 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_toler_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0 : \iota \Rightarrow \iota \Rightarrow o. \forall X1. ((\forall X2. (X2 \in X1) \Rightarrow (X0 \\ & X2 X2)) \wedge (\forall X2. \forall X3. ((X2 \in X1) \wedge ((X3 \in X1) \wedge (X0 X2 X3))) \Rightarrow \\ & (X0 X3 X2))) \Rightarrow (\exists X2. ((v1_relat_2 X2) \wedge ((v3_relat_2 X2) \wedge (\\ & (v1_partfun1 X2 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X1 X1)))))) \wedge (\forall X3. \forall X4. ((X3 \in X1) \wedge (X4 \in X1)) \Rightarrow ((k4_tarski \\ & X3 X4 \in X2) \Leftrightarrow (X0 X3 X4)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k4_tarski X0 X1 = k2_tarski (k2_tarski X0 X1) (k1_tarski X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k3_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. (X2 \in X3) \wedge (X3 \in X0))) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_2 X1) \wedge ((v3_relat_2 X1) \wedge ((v1_partfun1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow \\ & (\forall X2. (m1_toler_1 X2 X0 X1) \Leftrightarrow (\forall X3. \forall X4. ((X3 \in \\ & X2) \wedge (X4 \in X2)) \Rightarrow (k4_tarski X3 X4 \in X1))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. k2_tarski X0 X1 = k2_tarski X1 X0 \quad (5)$$

Theorem 1

$$\forall X0.\exists X1.((v1_relat_2 X1)\wedge((v3_relat_2 X1)\wedge((v1_partfun1 X1 (k3_tarski X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k3_tarski X0) (k3_tarski X0))))))))\wedge(\forall X2.(X2 \in X0)\Rightarrow(m1_toler_1 X2 (k3_tarski X0) X1))$$