

t9_combgras
(TMcxsv9L2bicn922msGpQo7ShyfyUknSN5W)

October 27, 2020

Let $l1_incsp_1 : \iota \Rightarrow o$ be given. Let $g1_incsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_incsp_1 : \iota \Rightarrow \iota$ be given. Let $u2_incsp_1 : \iota \Rightarrow \iota$ be given. Let $u3_incsp_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r4_incsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_incsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow (\forall X1.(l1_incsp_1 X1) \Rightarrow ((g1_incsp_1 \\ & (u1_incsp_1 X0) (u2_incsp_1 X0) (u3_incsp_1 X0) = g1_incsp_1 (u1_incsp_1 \\ & X1) (u2_incsp_1 X1) (u3_incsp_1 X1)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_incsp_1 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_incsp_1 X1)) \Rightarrow \\ & ((X2 = X3) \Rightarrow (\forall X4.(m1_subset_1 X4 (u2_incsp_1 X0)) \Rightarrow (\forall X5. \\ & (m1_subset_1 X5 (u2_incsp_1 X1)) \Rightarrow (((X4 = X5) \wedge (r1_incsp_1 X0 X2 \\ & X4)) \Rightarrow (r1_incsp_1 X1 X3 X5)))))))))) \end{aligned} \quad (1)$$

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.

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_incsp_1 X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u2_incsp_1 X0)) \Rightarrow \\ & ((r4_incsp_1 X0 X1 X2) \Leftrightarrow (\forall X3.(m1_subset_1 X3 (u1_incsp_1 \\ & X0)) \Rightarrow ((X3 \in X1) \Rightarrow (r1_incsp_1 X0 X3 X2)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow (\forall X1.(l1_incsp_1 X1) \Rightarrow ((g1_incsp_1 \\ & (u1_incsp_1 X0) (u2_incsp_1 X0) (u3_incsp_1 X0) = g1_incsp_1 (u1_incsp_1 \\ & X1) (u2_incsp_1 X1) (u3_incsp_1 X1)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (k1_zfmisc_1 (u1_incsp_1 X0))) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (k1_zfmisc_1 (u1_incsp_1 X1))) \Rightarrow ((X2 = X3) \Rightarrow (\forall X4.(m1_subset_1 \\ & X4 (u2_incsp_1 X0)) \Rightarrow (\forall X5.(m1_subset_1 X5 (u2_incsp_1 X1)) \Rightarrow \\ & (((X4 = X5) \wedge (r4_incsp_1 X0 X2 X4)) \Rightarrow (r4_incsp_1 X1 X3 X5)))))))))) \end{aligned}$$