

t26_projpl_1
(TMHM5Mfk3qxDVzUkyyNzKHeqVnej4MK4we5)

October 27, 2020

Let $v6_incsp_1 : \iota \Rightarrow o$ be given. Let $v1_incproj : \iota \Rightarrow o$ be given. Let $v2_incproj : \iota \Rightarrow o$ be given. Let $v3_incproj : \iota \Rightarrow o$ be given. Let $v4_incproj : \iota \Rightarrow o$ be given. Let $l1_incsp_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_incsp_1 : \iota \Rightarrow \iota$ be given. Let $r4_projpl_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u2_incsp_1 : \iota \Rightarrow \iota$ be given. Let $r1_incsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_incsp_1 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_incsp_1 X0)) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (u1_incsp_1 X0)) \Rightarrow ((r4_projpl_1 X0 X1 X2 X3) \Leftrightarrow (\exists X4. \\ & (m1_subset_1 X4 (u2_incsp_1 X0)) \wedge ((r1_incsp_1 X0 X1 X4) \wedge ((r1_incsp_1 \\ & X0 X2 X4) \wedge (r1_incsp_1 X0 X3 X4))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(r1_zfmisc_1 X0 X1 X2) \Leftrightarrow ((X0 \neq X1) \wedge ((X0 \neq X2) \wedge (X1 \neq X2))) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow ((v6_incsp_1 X0) \Leftrightarrow (\forall X1.(m1_subset_1 \\ & X1 (u1_incsp_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_incsp_1 X0)) \Rightarrow \\ & (\exists X3.(m1_subset_1 X3 (u2_incsp_1 X0)) \wedge ((r1_incsp_1 X0 \\ & X1 X3) \wedge (r1_incsp_1 X0 X2 X3)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v6_incsp_1 X0) \wedge ((v1_incproj X0) \wedge ((v2_incproj X0) \wedge \\ & ((v3_incproj X0) \wedge ((v4_incproj X0) \wedge (l1_incsp_1 X0)))))) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_incsp_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ & (u1_incsp_1 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_incsp_1 X0)) \Rightarrow \\ & ((\neg r4_projpl_1 X0 X1 X2 X3) \Rightarrow (r1_zfmisc_1 X1 X2 X3)))))) \end{aligned}$$