

t11_projpl_1

(TMFcSGcCjRkfV4RszdJJEEMWsg4GqfLRBZj)

October 27, 2020

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 $r4_projpl_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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.

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

Theorem 1

$$\begin{aligned}
& \forall X0.(l1_incsp_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_incsp_1 \\
& \quad X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_incsp_1 X0)) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 (u1_incsp_1 X0)) \Rightarrow ((r4_projpl_1 X0 X1 X2 X3) \Rightarrow ((\\
& \quad r4_projpl_1 X0 X1 X3 X2) \wedge ((r4_projpl_1 X0 X2 X1 X3) \wedge ((r4_projpl_1 \\
& \quad X0 X2 X3 X1) \wedge ((r4_projpl_1 X0 X3 X1 X2) \wedge (r4_projpl_1 X0 X3 X2 X1)))))))))
\end{aligned}$$