

t56_armstrng
(TMQV4jWnSD7f72VSRrUkznawq6GALja61mY)

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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 $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k6_armstrng : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k14_armstrng : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& (k9_setfam_1 X0) (k9_setfam_1 X0)))) \Rightarrow (k14_armstrng X0 X1 = ReplSep \\
& (toset (\lambda X2 : \iota. m1_subset_1 X2 (k1_zfmisc_1 X0))) (\lambda X2 : \\
& \iota. \exists X3. (m1_subset_1 X3 (k1_zfmisc_1 X0)) \wedge (\exists X4. \\
& (m1_subset_1 X4 (k1_zfmisc_1 X0)) \wedge ((k6_armstrng X0 X3 X4 \in X1) \wedge \\
& ((r1_tarski X3 X2) \wedge (\neg r1_tarski X4 X2)))))) (\lambda X2 : \iota. X2))
\end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
& \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (k9_setfam_1 X0) (k9_setfam_1 \\
& X0)))) \Rightarrow ((\exists X3. (m1_subset_1 X3 (k1_zfmisc_1 X0)) \wedge (\exists X4. \\
& (m1_subset_1 X4 (k1_zfmisc_1 X0)) \wedge ((k6_armstrng X0 X3 X4 \in X2) \wedge \\
& ((r1_tarski X3 X1) \wedge (\neg r1_tarski X4 X1)))))) \Rightarrow (X1 \in k14_armstrng X0 \\
& X2)))
\end{aligned}$$