

t5_kurato_1

(TMUVd2FJiKAZ48ogy6pk9h7Jc18qN7aQhSd)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_kurato_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_kurato_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_kurato_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
& X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\
& X0))) \Rightarrow (k2_kurato_1 X0 X1 = k2_xboole_0 (k2_xboole_0 (k4_enumset1 \\
& (k2_pre_topc X0 X1) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 \\
& X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc \\
& X0 X1)))))) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) X1)) (\\
& k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 (\\
& k3_subset_1 (u1_struct_0 X0) X1)))) (k2_pre_topc X0 (k3_subset_1 \\
& (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) \\
& (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) X1)))))) (k2_tarski \\
& X1 (k3_subset_1 (u1_struct_0 X0) X1)) (k4_enumset1 (k3_subset_1 \\
& (u1_struct_0 X0) (k2_pre_topc X0 X1)) (k3_subset_1 (u1_struct_0 \\
& X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc \\
& X0 X1)))) (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 \\
& (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) \\
& (k2_pre_topc X0 X1)))))) (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) X1)) (k3_subset_1 (u1_struct_0 \\
& X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) X1)))))) (k3_subset_1 (u1_struct_0 \\
& X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) X1)))))) (k3_subset_1 (u1_struct_0 \\
& X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) X1)))))))))
\end{aligned}$$

(1)

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
& X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\
& X0))) \Rightarrow (k4_kurato_1 X0 X1 = k4_enumset1 (k3_subset_1 (u1_struct_0 \\
& X0) (k2_pre_topc X0 X1) (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 X1)))) (k3_subset_1 \\
& (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) \\
& (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 \\
& X1)))))) (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 \\
& (u1_struct_0 X0) X1))) (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 \\
& (u1_struct_0 X0) X1)))) (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 \\
& (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) \\
& X1))))))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
& X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\
& X0))) \Rightarrow (k3_kurato_1 X0 X1 = k4_enumset1 (k2_pre_topc X0 X1) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 X1))) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 \\
& (u1_struct_0 X0) (k2_pre_topc X0 X1)))) (k2_pre_topc X0 (k3_subset_1 \\
& (u1_struct_0 X0) X1) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 \\
& X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) X1)))) (k2_pre_topc \\
& X0 (k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 \\
& (u1_struct_0 X0) (k2_pre_topc X0 (k3_subset_1 (u1_struct_0 X0) \\
& X1))))))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
& X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\
& X0))) \Rightarrow (k2_kurato_1 X0 X1 = k2_xboole_0 (k2_xboole_0 (k2_tarSKI \\
& X1 (k3_subset_1 (u1_struct_0 X0) X1) (k3_kurato_1 X0 X1)) (k4_kurato_1 \\
& X0 X1)))
\end{aligned}$$