

t4_vectmetr
(TMdo2ug4TTCu3Kuc1Hp4QWqon9AdeJErVrN)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v6_metric_1 : \iota \Rightarrow o$ be given. Let $v7_metric_1 : \iota \Rightarrow o$ be given. Let $l1_metric_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v2_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_vectmetr : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tops_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v6_metric_1 X0) \wedge \\
& ((v7_metric_1 X0) \wedge (l1_metric_1 X0)))) \wedge ((v1_funct_1 X1) \wedge ((v1_funct_2 \\
& X1 (u1_struct_0 X0) (u1_struct_0 X0)) \wedge ((v2_funct_2 X1 (u1_struct_0 \\
& X0)) \wedge ((v3_vectmetr X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0)))))))))) \Rightarrow ((v1_funct_1 (k2_tops_2 \\
& (u1_struct_0 X0) (u1_struct_0 X0) X1)) \wedge ((v1_funct_2 (k2_tops_2 \\
& (u1_struct_0 X0) (u1_struct_0 X0) X1) (u1_struct_0 X0) (u1_struct_0 \\
& X0)) \wedge ((v2_funct_2 (k2_tops_2 (u1_struct_0 X0) (u1_struct_0 X0) \\
& X1) (u1_struct_0 X0)) \wedge (v3_vectmetr (k2_tops_2 (u1_struct_0 X0) \\
& (u1_struct_0 X0) X1) X0))))))
\end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
& \forall X0. (((\neg v2_struct_0 X0) \wedge ((v6_metric_1 X0) \wedge ((v7_metric_1 \\
& X0) \wedge (l1_metric_1 X0)))) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 \\
& X1 (u1_struct_0 X0) (u1_struct_0 X0)) \wedge ((v2_funct_2 X1 (u1_struct_0 \\
& X0)) \wedge ((v3_vectmetr X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0)))))))))) \Rightarrow ((v2_funct_2 (k2_tops_2 \\
& (u1_struct_0 X0) (u1_struct_0 X0) X1) (u1_struct_0 X0)) \wedge (v3_vectmetr \\
& (k2_tops_2 (u1_struct_0 X0) (u1_struct_0 X0) X1) X0)))
\end{aligned}$$