

t11_conlat_2

(TMRHnocFNR2NEZwivEMJhrFrV9i8ky4kyH4)

October 27, 2020

Let $v1_conlat_1 : \iota \Rightarrow o$ be given. Let $l1_conlat_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u4_struct_0 : \iota \Rightarrow \iota$ be given. Let $v5_conlat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_conlat_1 : \iota \Rightarrow \iota$ be given. Let $k4_conlat_2 : \iota \Rightarrow \iota$ be given. Let $v7_conlat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l2_conlat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_conlat_2 : \iota \Rightarrow \iota$ be given. Let $l5_struct_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_conlat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12_conlat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v1_conlat_1 X0) \wedge (l5_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \quad (1)$$

Assume the following.

$$\forall X0.((\neg v1_conlat_1 X0) \wedge (l5_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u4_struct_0 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(l1_conlat_1 X0) \Rightarrow (l5_struct_0 X0) \quad (3)$$

Assume the following.

$$\forall X0.((\neg v1_conlat_1 X0) \wedge (l1_conlat_1 X0)) \Rightarrow ((v1_funct_1 (k5_conlat_2 X0)) \wedge ((v1_funct_2 (k5_conlat_2 X0) (u4_struct_0 X0) (u1_struct_0 (k11_conlat_1 X0)))) \wedge (m1_subset_1 (k5_conlat_2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u4_struct_0 X0) (u1_struct_0 (k11_conlat_1 X0)))))) \quad (4)$$

Assume the following.

$$\forall X0.((\neg v1_conlat_1 X0) \wedge (l1_conlat_1 X0)) \Rightarrow ((v1_funct_1 (k4_conlat_2 X0)) \wedge ((v1_funct_2 (k4_conlat_2 X0) (u1_struct_0 X0) (u1_struct_0 (k11_conlat_1 X0)))) \wedge (m1_subset_1 (k4_conlat_2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 (k11_conlat_1 X0)))))) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge \\ & (((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X1)\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))))\wedge(m1_subset_1 X3 X0))\Rightarrow(m1_subset_1 (\\ & k3_funct_2 X0 X1 X2 X3) X1) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((\neg v1_conlat_1 X0)\wedge(l1_conlat_1 X0))\wedge \\ & (m1_subset_1 X1 (u1_struct_0 (k11_conlat_1 X0))))\Rightarrow((v4_conlat_1 \\ & (k12_conlat_1 X0 X1) X0)\wedge((\neg v5_conlat_1 (k12_conlat_1 X0 X1) X0)\wedge \\ & ((v7_conlat_1 (k12_conlat_1 X0 X1) X0)\wedge(l2_conlat_1 (k12_conlat_1 \\ & X0 X1) X0)))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_conlat_1 X0)\wedge(l1_conlat_1 X0))\Rightarrow(\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 (k11_conlat_1 X0)))\Rightarrow(k12_conlat_1 \\ & X0 X1 = X1)) \end{aligned} \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_conlat_1 X0)\wedge(l1_conlat_1 X0))\Rightarrow(\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(\forall X2.(m1_subset_1 X2 \\ & (u4_struct_0 X0))\Rightarrow(((\neg v5_conlat_1 (k3_funct_2 (u1_struct_0 \\ & X0) (u1_struct_0 (k11_conlat_1 X0)) (k4_conlat_2 X0) X1) X0)\wedge(\\ & (v7_conlat_1 (k3_funct_2 (u1_struct_0 X0) (u1_struct_0 (k11_conlat_1 \\ & X0)) (k4_conlat_2 X0) X1) X0)\wedge(l2_conlat_1 (k3_funct_2 (u1_struct_0 \\ & X0) (u1_struct_0 (k11_conlat_1 X0)) (k4_conlat_2 X0) X1) X0))))\wedge \\ & ((\neg v5_conlat_1 (k3_funct_2 (u4_struct_0 X0) (u1_struct_0 (k11_conlat_1 \\ & X0)) (k5_conlat_2 X0) X2) X0)\wedge((v7_conlat_1 (k3_funct_2 (u4_struct_0 \\ & X0) (u1_struct_0 (k11_conlat_1 X0)) (k5_conlat_2 X0) X2) X0)\wedge(\\ & l2_conlat_1 (k3_funct_2 (u4_struct_0 X0) (u1_struct_0 (k11_conlat_1 \\ & X0)) (k5_conlat_2 X0) X2) X0)))))) \end{aligned}$$