

t21_hermitan

(TMPsJ4i5R6KCCfdWMAefP3nkjqY5guHJzgc)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_vectsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_complfld : \iota$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_hermitan : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_hahnban1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_hahnban1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_hahnban1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l5_algstr_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_vectsp_1 X0 k1_complfld)) \Rightarrow \\
 & (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (u1_struct_0 X0) \\
 & (u1_struct_0 k1_complfld)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & (u1_struct_0 X0) (u1_struct_0 k1_complfld)))))) \Rightarrow (r2_funct_2 \\
 & (u1_struct_0 X0) (u1_struct_0 k1_complfld) (k1_hermitan X0 (k4_hahnban1 \\
 & k1_complfld X0 X1)) (k4_hahnban1 k1_complfld X0 (k1_hermitan X0 \\
 & X1))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_vectsp_1 X0 k1_complfld)) \Rightarrow \\
 & (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (u1_struct_0 X0) \\
 & (u1_struct_0 k1_complfld)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & (u1_struct_0 X0) (u1_struct_0 k1_complfld)))))) \Rightarrow (\forall X2. \\
 & ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (u1_struct_0 X0) (u1_struct_0 \\
 & k1_complfld)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 \\
 & X0) (u1_struct_0 k1_complfld)))))) \Rightarrow (r2_funct_2 (u1_struct_0 \\
 & X0) (u1_struct_0 k1_complfld) (k1_hermitan X0 (k3_hahnban1 k1_complfld \\
 & X0 X1 X2)) (k3_hahnban1 k1_complfld X0 (k1_hermitan X0 X1) (k1_hermitan \\
 & X0 X2))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(((v1_funct_1 X2)\wedge \\ & ((v1_funct_2 X2 X0 X1)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1)))))\wedge((v1_funct_1 X3)\wedge((v1_funct_2 X3 X0 X1)\wedge(m1_subset_1 \\ & X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))))\Rightarrow((r2_funct_2 X0 X1 X2 \\ & X3)\Leftrightarrow(X2 = X3)) \end{aligned} \quad (3)$$

Assume the following.

$$(\neg v2_struct_0 k1_complfld)\wedge(v36_algstr_0 k1_complfld) \quad (4)$$

Assume the following.

$$\forall X0.(l6_algstr_0 X0)\Rightarrow((l2_algstr_0 X0)\wedge(l5_algstr_0 X0)) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0)\wedge(l2_algstr_0 \\ & X0))\wedge(((\neg v2_struct_0 X1)\wedge(l1_vectsp_1 X1 X0))\wedge((v1_funct_1 \\ & X2)\wedge((v1_funct_2 X2 (u1_struct_0 X1) (u1_struct_0 X0))\wedge(m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X1) (u1_struct_0 X0))))))\Rightarrow \\ & ((v1_funct_1 (k4_hahnban1 X0 X1 X2))\wedge((v1_funct_2 (k4_hahnban1 \\ & X0 X1 X2) (u1_struct_0 X1) (u1_struct_0 X0))\wedge(m1_subset_1 (k4_hahnban1 \\ & X0 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X1) (u1_struct_0 \\ & X0)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((\neg v2_struct_0 X0)\wedge(l1_vectsp_1 X0 k1_complfld))\wedge \\ & ((v1_funct_1 X1)\wedge((v1_funct_2 X1 (u1_struct_0 X0) (u1_struct_0 \\ & k1_complfld))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 \\ & X0) (u1_struct_0 k1_complfld))))))\Rightarrow((v1_funct_1 (k1_hermitan \\ & X0 X1))\wedge((v1_funct_2 (k1_hermitan X0 X1) (u1_struct_0 X0) (u1_struct_0 \\ & k1_complfld))\wedge(m1_subset_1 (k1_hermitan X0 X1) (k1_zfmisc_1 \\ & (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 k1_complfld)))))) \end{aligned} \quad (7)$$

Assume the following.

$$(v36_algstr_0 k1_complfld)\wedge(l6_algstr_0 k1_complfld) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge(l2_algstr_0 X0))\Rightarrow(\forall X1. \\ & ((\neg v2_struct_0 X1)\wedge(l1_vectsp_1 X1 X0))\Rightarrow(\forall X2.((v1_funct_1 \\ & X2)\wedge((v1_funct_2 X2 (u1_struct_0 X1) (u1_struct_0 X0))\wedge(m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X1) (u1_struct_0 X0))))))\Rightarrow \\ & (\forall X3.((v1_funct_1 X3)\wedge((v1_funct_2 X3 (u1_struct_0 X1) \\ & (u1_struct_0 X0))\wedge(m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X1) (u1_struct_0 X0))))))\Rightarrow(k5_hahnban1 X0 X1 X2 X3 = \\ & k3_hahnban1 X0 X1 X2 (k4_hahnban1 X0 X1 X3)))) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_vectsp_1 X0 k1_complfld)) \Rightarrow \\ & (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (u1_struct_0 X0) \\ & (u1_struct_0 k1_complfld)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X0) (u1_struct_0 k1_complfld)))))) \Rightarrow (\forall X2. \\ & ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (u1_struct_0 X0) (u1_struct_0 \\ & k1_complfld)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 \\ & X0) (u1_struct_0 k1_complfld)))))) \Rightarrow (r2_funct_2 (u1_struct_0 \\ & X0) (u1_struct_0 k1_complfld) (k1_hermitan X0 (k5_hahnban1 k1_complfld \\ & X0 X1 X2)) (k5_hahnban1 k1_complfld X0 (k1_hermitan X0 X1) (k1_hermitan \\ & X0 X2)))))) \end{aligned}$$