

t22_hilbert1

(TMQUVNTmwsp2QQ8Xs7J44FqJLeR6zPCV71M)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_hilbert1 : \iota$ be given. Let $k3_hilbert1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_hilbert1 : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k5_hilbert1 : \iota \Rightarrow \iota$ be given. Let $k1_subset_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_hilbert1)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 k1_hilbert1) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_hilbert1) \Rightarrow \\ & (((X1 \in k5_hilbert1 X0) \wedge (k3_hilbert1 X1 X2 \in k5_hilbert1 X0)) \Rightarrow (\\ & \quad X2 \in k5_hilbert1 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_hilbert1) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k1_hilbert1) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_hilbert1) \Rightarrow (k3_hilbert1 \\ & (k3_hilbert1 X0 X1) (k3_hilbert1 (k3_hilbert1 X1 X2) (k3_hilbert1 \\ & \quad X0 X2)) \in k6_hilbert1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1_subset_1 X0 k1_hilbert1) \wedge (m1_subset_1 \\ & X1 k1_hilbert1)) \Rightarrow (m1_subset_1 (k3_hilbert1 X0 X1) k1_hilbert1) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.m1_subset_1 (k1_subset_1 X0) (k1_zfmisc_1 X0) \quad (4)$$

Assume the following.

$$k6_hilbert1 = k5_hilbert1 (k1_subset_1 k1_hilbert1) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_hilbert1) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k1_hilbert1) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_hilbert1) \Rightarrow ((\\ & k3_hilbert1 X0 X1 \in k6_hilbert1) \Rightarrow (k3_hilbert1 (k3_hilbert1 X1 \\ & \quad X2) (k3_hilbert1 X0 X2) \in k6_hilbert1)))) \end{aligned}$$