

l2_substlat

(TMPi1BriYwKYm3w2bRtcCm8G6qZvYSQbxcY)

October 27, 2020

Let $k1_substlat : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finsub_1 : \iota \Rightarrow \iota$ be given. Let $k4_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. k1_substlat X0 X1 = ReplSep (toset (\lambda X2 : \\
 & \quad \iota. m1_subset_1 X2 (k5_finsub_1 (k4_partfun1 X0 X1)))) (\lambda X2 : \\
 & \quad \iota. (\forall X3. (X3 \in X2) \Rightarrow (v1_finset_1 X3)) \wedge (\forall X3. (m1_subset_1 \\
 & \quad X3 (k4_partfun1 X0 X1)) \Rightarrow (\forall X4. (m1_subset_1 X4 (k4_partfun1 \\
 & \quad X0 X1)) \Rightarrow (((X3 \in X2) \wedge ((X4 \in X2) \wedge (r1_tarski X3 X4))) \Rightarrow (X3 = X4)))))) \\
 & \quad (\lambda X2 : \iota. X2)
 \end{aligned} \tag{1}$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. \forall X3. ((X3 \in k1_substlat X0 X1) \wedge (X2 \in X3)) \Rightarrow (v1_finset_1 X2)$$