t21_pcs_0 (TMHFy8EC9cGuCmrDf7VMBfQTowg3t43GBmr)

October 27, 2020

Let $l2\_pcs\_0 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k19\_pcs\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_orders\_2 : \iota \Rightarrow \iota$ be given. Let $u1\_pcs\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $l1\_pcs\_0 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $v12\_pcs\_0 : \iota \Rightarrow o$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ (k2\_xboole\_0\ X0\ X1) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow((r1\_relset\_1\ X0\ X1\ X2\ X3)\Leftrightarrow(r1\_tarski\ X2\ X3)) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_pcs\_0\ X0)\Rightarrow(m1\_subset\_1\ (u1\_pcs\_0\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)))) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(m1\_subset\_1\ (u1\_orders\_2\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)))) \tag{4}$$

Assume the following.

$$\forall X0.(l2\_pcs\_0\ X0)\Rightarrow((l1\_orders\_2\ X0)\wedge(l1\_pcs\_0\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(l2\_pcs\_0\ X0)\Rightarrow((v12\_pcs\_0\ (k19\_pcs\_0\ X0\ X1))\wedge(l2\_pcs\_0\ (k19\_pcs\_0\ X0\ X1))) \tag{6}$$

Assume the following.

$$\forall X0.(l2\_pcs\_0\ X0)\Rightarrow(\forall X1.\forall X2.((v12\_pcs\_0\ X2)\wedge(l2\_pcs\_0\ X2))\Rightarrow((X2 = k19\_pcs\_0\ X0\ X1)\Leftrightarrow((u1\_struct\_0\ X2 = k2\_xboole\_0\ (k1\_tarski\ X1)\ (u1\_struct\_0\ X0))\wedge((u1\_orders\_2\ X2 = k2\_xboole\_0\ (k2\_zfmisc\_1\ (k1\_tarski\ X1)\ (u1\_struct\_0\ X2))\ (u1\_orders\_2\ X0))\wedge(u1\_pcs\_0\ X2 = k2\_xboole\_0\ (k2\_xboole\_0\ (k2\_zfmisc\_1\ (k1\_tarski\ X1)\ (u1\_struct\_0\ X2))\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X2)\ (k1\_tarski\ X1)))\ (u1\_pcs\_0\ X0))))))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{8}$$

Theorem 1

$$\forall X0.(l2\_pcs\_0\ X0)\Rightarrow(\forall X1.(r1\_tarski\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ (k19\_pcs\_0\ X0\ X1)))\wedge((r1\_relset\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0)\ (u1\_orders\_2\ (k19\_pcs\_0\ X0\ X1)))\wedge(r1\_relset\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (u1\_pcs\_0\ X0)\ (u1\_pcs\_0\ (k19\_pcs\_0\ X0\ X1)))))$$