t65_tmap_1 (TMKkRKMz9qkqTBJFqmZbbF5VXRJwhgKgAaV)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_pre\_topc : \iota \Rightarrow o$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $m1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$ 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 $u1\_struct\_0 : \iota \Rightarrow \iota$ 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 $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_tmap\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \Rightarrow ((X0 \in X1) \Rightarrow (k1\_funct\_1\ (k5\_relat\_1\ X2\ X1)\ X0 = k1\_funct\_1\ X2\ X0)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((\neg v1\_xboole\_0\ X0) \wedge (((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X0\ X1) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))) \wedge (m1\_subset\_1\ X3\ X0))) \Rightarrow (k3\_funct\_2\ X0\ X1\ X2\ X3 = k1\_funct\_1\ X2\ X3) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \Rightarrow (k2\_partfun1\ X0\ X1\ X2\ X3 = k5\_relat\_1\ X2\ X3) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_struct\_0\ X0)) \Rightarrow (\neg v1\_xboole\_0\ (u1\_struct\_0\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_pre\_topc\ X1\ X0) \Rightarrow (l1\_pre\_topc\ X1)) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(l1\_struct\_0\ X0) \tag{6}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v2\_pre\_topc\ X1)\wedge(l1\_pre\_topc\ X1)))\Rightarrow(\forall X2.(m1\_pre\_topc\ X2\ X0)\Rightarrow(\forall X3.(m1\_pre\_topc\ X3\ X0)\Rightarrow(\forall X4.((v1\_funct\_1\ X4)\wedge((v1\_funct\_2\ X4\ (u1\_struct\_0\ X2)\ (u1\_struct\_0\ X1))\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X2)\ (u1\_struct\_0\ X1))))))\Rightarrow((m1\_pre\_topc\ X3\ X2)\Rightarrow(k3\_tmap\_1\ X0\ X1\ X2\ X3\ X4 = k2\_partfun1\ (u1\_struct\_0\ X2)\ (u1\_struct\_0\ X1)\ X4\ (u1\_struct\_0\ X3)))))))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{8}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v2\_pre\_topc\ X1)\wedge(l1\_pre\_topc\ X1)))\Rightarrow(\forall X2.((\neg v2\_struct\_0\ X2)\wedge(m1\_pre\_topc\ X2\ X0))\Rightarrow(\forall X3.((\neg v2\_struct\_0\ X3)\wedge(m1\_pre\_topc\ X3\ X0))\Rightarrow(\forall X4.((v1\_funct\_1\ X4)\wedge((v1\_funct\_2\ X4\ (u1\_struct\_0\ X3)\ (u1\_struct\_0\ X1))\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X3)\ (u1\_struct\_0\ X1))))))\Rightarrow((m1\_pre\_topc\ X2\ X3)\Rightarrow(\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X3))\Rightarrow((X5 \in u1\_struct\_0\ X2)\Rightarrow(k3\_funct\_2\ (u1\_struct\_0\ X3)\ (u1\_struct\_0\ X1)\ X4\ X5 = k1\_funct\_1\ (k3\_tmap\_1\ X0\ X1\ X3\ X2\ X4)\ X5)))))))))$$