t18_autgroup (TMPRejqhsLoc3Dq1wcB9LnZK9TCgG9sRXZr)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v15\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v2\_group\_1 : \iota \Rightarrow o$ be given. Let $v3\_group\_1 : \iota \Rightarrow o$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_autgroup : \iota \Rightarrow \iota$ be given. Let $m2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_autgroup : \iota \Rightarrow \iota$ be given. Let $k6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_autgroup : \iota \Rightarrow \iota$ be given. Let $k1\_autgroup : \iota \Rightarrow \iota$ be given. Let $m1\_group\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_group\_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v15\_algstr\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge ((v3\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k3\_autgroup\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k3\_autgroup\ X0))) \Rightarrow (\forall X3.(m2\_funct\_2\ X3\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (k1\_autgroup\ X0)) \Rightarrow (\forall X4.(m2\_funct\_2\ X4\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (k1\_autgroup\ X0)) \Rightarrow (((X1 = X3) \wedge (X2 = X4)) \Rightarrow (k6\_algstr\_0\ (k3\_autgroup\ X0)\ X1\ X2 = k1\_partfun1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ X4\ X3)))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_group\_2\ X3\ X0) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X3)) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X3)) \Rightarrow (((X4 = X1) \wedge (X5 = X2)) \Rightarrow (k6\_algstr\_0\ X3\ X4\ X5 = k6\_algstr\_0\ X0\ X1\ X2))))))) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0))) \Rightarrow (\forall X1.(m1\_group\_2\ X1\ X0) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1)) \Rightarrow (m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)))) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v15\_algstr\_0\ X0)\wedge((v2\_group\_1\ X0)\wedge((v3\_group\_1\ X0)\wedge(l3\_algstr\_0\ X0)))))\Rightarrow(\forall X1.(m2\_funct\_2\ X1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (k4\_autgroup\ X0))\Rightarrow(m2\_funct\_2\ X1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (k1\_autgroup\ X0))) \tag{4}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v15\_algstr\_0\ X0)\wedge((v2\_group\_1\ X0)\wedge((v3\_group\_1\ X0)\wedge(l3\_algstr\_0\ X0)))))\Rightarrow((v15\_algstr\_0\ (k5\_autgroup\ X0))\wedge((v1\_group\_3\ (k5\_autgroup\ X0)\ (k3\_autgroup\ X0))\wedge(m1\_group\_2\ (k5\_autgroup\ X0)\ (k3\_autgroup\ X0)))) \tag{5}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v15\_algstr\_0\ X0)\wedge((v2\_group\_1\ X0)\wedge((v3\_group\_1\ X0)\wedge(l3\_algstr\_0\ X0)))))\Rightarrow((\neg v2\_struct\_0\ (k3\_autgroup\ X0))\wedge((v15\_algstr\_0\ (k3\_autgroup\ X0))\wedge((v2\_group\_1\ (k3\_autgroup\ X0))\wedge((v3\_group\_1\ (k3\_autgroup\ X0))\wedge(l3\_algstr\_0\ (k3\_autgroup\ X0)))))) \tag{6}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v15\_algstr\_0\ X0)\wedge((v2\_group\_1\ X0)\wedge((v3\_group\_1\ X0)\wedge(l3\_algstr\_0\ X0)))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k5\_autgroup\ X0)))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k5\_autgroup\ X0)))\Rightarrow(\forall X3.(m2\_funct\_2\ X3\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (k4\_autgroup\ X0))\Rightarrow(\forall X4.(m2\_funct\_2\ X4\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (k4\_autgroup\ X0))\Rightarrow(((X1 = X3)\wedge(X2 = X4))\Rightarrow(k6\_algstr\_0\ (k5\_autgroup\ X0)\ X1\ X2 = k1\_partfun1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ X4\ X3)))))$$