t20_jordan18 (TMH4DdFrM3bm5USUbcRkusiPBy4x3pYt1Cd)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k15\_euclid : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $v2\_compts\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_jordan18 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_jordan18 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k18\_euclid : \iota \Rightarrow \iota$ be given. Let $k4\_topreal1 : \iota \Rightarrow \iota$ be given. Let $k6\_topreal1 : \iota \Rightarrow \iota$ be given. Let $k17\_euclid : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X2))) \Rightarrow (m1\_subset\_1\ X0\ X2) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X1.((v2\_compts\_1\ X1\ (k15\_euclid\ np\_\_2)) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))))) \Rightarrow ((X0 \in k1\_jordan2c\ np\_\_2\ X1) \Rightarrow ((\neg r1\_xxreal\_0\ (k18\_euclid\ X0)\ (k18\_euclid\ (k2\_jordan18\ X0\ X1))) \wedge (\neg r1\_xxreal\_0\ (k18\_euclid\ (k1\_jordan18\ X0\ X1))\ (k18\_euclid\ X0)))))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X1.((v2\_compts\_1\ X1\ (k15\_euclid\ np\_\_2)) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))))) \Rightarrow ((X0 \in k1\_jordan2c\ np\_\_2\ X1) \Rightarrow ((k1\_jordan18\ X0\ X1 \in X1) \wedge ((k1\_jordan18\ X0\ X1 \in k4\_topreal1\ X0) \wedge ((k2\_jordan18\ X0\ X1 \in X1) \wedge (k2\_jordan18\ X0\ X1 \in k6\_topreal1\ X0)))))) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (m1\_subset\_1\ (k4\_topreal1\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \tag{4}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow((X1 = k4\_topreal1\ X0)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow((X2 \in X1)\Leftrightarrow((k17\_euclid\ X2 = k17\_euclid\ X0)\wedge(r1\_xxreal\_0\ (k18\_euclid\ X0)\ (k18\_euclid\ X2))))))) \tag{5}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.((v2\_compts\_1\ X1\ (k15\_euclid\ np\_\_2))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))))\Rightarrow(\neg(X0 \in k1\_jordan2c\ np\_\_2\ X1)\wedge(k2\_jordan18\ X0\ X1 = k1\_jordan18\ X0\ X1)))$$