

t11\_e\_siec  
(TMF6ffqa9LqqCpkuwCAYzPTVtKUAMQ4ipg8)

October 27, 2020

Let  $v2\_e\_siec : \iota \Rightarrow o$  be given. Let  $v3\_e\_siec : \iota \Rightarrow o$  be given. Let  $l1\_e\_siec : \iota \Rightarrow o$  be given. Let  $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_e\_siec : \iota \Rightarrow \iota$  be given. Let  $k4\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u2\_e\_siec : \iota \Rightarrow \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow ((r1\_tarski X1 (k2\_zfmisc\_1 \\ X0 X0)) \Rightarrow ((k6\_subset\_1 X1 (k4\_relat\_1 (k9\_xtuple\_0 X1)) = k6\_subset\_1 \\ X1 (k4\_relat\_1 X0)) \wedge (k6\_subset\_1 X1 (k4\_relat\_1 (k10\_xtuple\_0 \\ X1)) = k6\_subset\_1 X1 (k4\_relat\_1 X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. k6\_subset\_1 X0 X1 = k4\_xboole\_0 X0 X1 \tag{2}$$

Assume the following.

$$\forall X0. (l1\_e\_siec X0) \Rightarrow (v1\_relat\_1 (u2\_e\_siec X0)) \tag{3}$$

Assume the following.

$$\forall X0. (l1\_e\_siec X0) \Rightarrow (v1\_relat\_1 (u1\_e\_siec X0)) \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0. (l1\_e\_siec X0) \Rightarrow ((v2\_e\_siec X0) \Leftrightarrow ((r1\_tarski (u1\_e\_siec \\ X0) (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0))) \wedge ((r1\_tarski \\ (u2\_e\_siec X0) (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0))) \wedge \\ ((k3\_relat\_1 (u1\_e\_siec X0) (u1\_e\_siec X0) = u1\_e\_siec X0) \wedge ((k3\_relat\_1 \\ (u1\_e\_siec X0) (u2\_e\_siec X0) = u1\_e\_siec X0) \wedge ((k3\_relat\_1 (u2\_e\_siec \\ X0) (u2\_e\_siec X0) = u2\_e\_siec X0) \wedge (k3\_relat\_1 (u2\_e\_siec X0) ( \\ u1\_e\_siec X0) = u2\_e\_siec X0)))))) \end{aligned} \tag{5}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v2\_e\_siec X0) \wedge ((v3\_e\_siec X0) \wedge (l1\_e\_siec X0))) \Rightarrow \\ & ((k4\_xboole\_0 (u1\_e\_siec X0) (k4\_relat\_1 (k9\_xtuple\_0 (u1\_e\_siec \\ & X0))) = k4\_xboole\_0 (u1\_e\_siec X0) (k4\_relat\_1 (u1\_struct\_0 X0))) \wedge \\ & ((k4\_xboole\_0 (u2\_e\_siec X0) (k4\_relat\_1 (k9\_xtuple\_0 (u2\_e\_siec \\ & X0))) = k4\_xboole\_0 (u2\_e\_siec X0) (k4\_relat\_1 (u1\_struct\_0 X0))) \wedge \\ & ((k4\_xboole\_0 (u1\_e\_siec X0) (k4\_relat\_1 (k10\_xtuple\_0 (u1\_e\_siec \\ & X0))) = k4\_xboole\_0 (u1\_e\_siec X0) (k4\_relat\_1 (u1\_struct\_0 X0))) \wedge \\ & (k4\_xboole\_0 (u2\_e\_siec X0) (k4\_relat\_1 (k10\_xtuple\_0 (u2\_e\_siec \\ & X0))) = k4\_xboole\_0 (u2\_e\_siec X0) (k4\_relat\_1 (u1\_struct\_0 X0)))))) \end{aligned}$$