

## t56\_cohsp\_1

(TMVeb51BbmEDzv5juEPCAVjwUJb7aCvvg952)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_classes1 : \iota \Rightarrow o$  be given. Let  $v1\_coh\_sp : \iota \Rightarrow o$  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  $k3\_tarski : \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  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  $v10\_cohsp\_1 : \iota \Rightarrow o$  be given. Let  $k11\_cohsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v1\_xboole\_0 X0) \wedge ((v1\_classes1 X0) \wedge (v1\_coh\_sp \\
 & X0))) \Rightarrow (\forall X1.((\neg v1\_xboole\_0 X1) \wedge ((v1\_classes1 X1) \wedge (v1\_coh\_sp \\
 & X1))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
 & (k3\_tarski X0) (k3\_tarski X1)))) \Rightarrow (\neg(\forall X3.\forall X4.(k2\_tarski \\
 & X3 X4 \in X0) \Rightarrow (\forall X5.\forall X6.((k4\_tarski X3 X5 \in X2) \wedge (k4\_tarski \\
 & X4 X6 \in X2)) \Rightarrow (k2\_tarski X5 X6 \in X1)))) \wedge ((\forall X3.\forall X4.(k2\_tarski \\
 & X3 X4 \in X0) \Rightarrow (\forall X5.((k4\_tarski X3 X5 \in X2) \wedge (k4\_tarski X4 X5 \in \\
 & X2)) \Rightarrow (X3 = X4))) \wedge (\forall X3.((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 \\
 & X0 X1) \wedge ((v10\_cohsp\_1 X3) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
 & X0 X1)))))) \Rightarrow (\neg(X2 = k11\_cohsp\_1 X0 X1 X3) \wedge (\forall X4.(m1\_subset\_1 \\
 & X4 X0) \Rightarrow (k3\_funct\_2 X0 X1 X3 X4 = k7\_relat\_1 X2 X4)))))))))
 \end{aligned} \tag{1}$$

### Theorem 1

$$\begin{aligned}
 & \forall X0.((\neg v1\_xboole\_0 X0) \wedge ((v1\_classes1 X0) \wedge (v1\_coh\_sp \\
 & X0))) \Rightarrow (\forall X1.((\neg v1\_xboole\_0 X1) \wedge ((v1\_classes1 X1) \wedge (v1\_coh\_sp \\
 & X1))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
 & (k3\_tarski X0) (k3\_tarski X1)))) \Rightarrow (\neg(\forall X3.\forall X4.(k2\_tarski \\
 & X3 X4 \in X0) \Rightarrow (\forall X5.\forall X6.((k4\_tarski X3 X5 \in X2) \wedge (k4\_tarski \\
 & X4 X6 \in X2)) \Rightarrow (k2\_tarski X5 X6 \in X1)))) \wedge ((\forall X3.\forall X4.(k2\_tarski \\
 & X3 X4 \in X0) \Rightarrow (\forall X5.((k4\_tarski X3 X5 \in X2) \wedge (k4\_tarski X4 X5 \in \\
 & X2)) \Rightarrow (X3 = X4))) \wedge (\forall X3.((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 \\
 & X0 X1) \wedge ((v10\_cohsp\_1 X3) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
 & X0 X1)))))) \Rightarrow (X2 \neq k11\_cohsp\_1 X0 X1 X3))))))
 \end{aligned}$$