

interleaving_occurence^{4,23}

interleaving_occurence($T; L_1; L_2; L; f_1; f_2$)

$$\begin{aligned} \equiv_{\text{def}} \quad & \|L\| = \|L_1\| + \|L_2\| \\ & \& \text{increasing}(f_1; \|L_1\|) \& (\forall j: \mathbb{N}_{<\|L_1\|}. L_1[j] = L[f_1(j)]) \\ & \& \text{increasing}(f_2; \|L_2\|) \& (\forall j: \mathbb{N}_{<\|L_2\|}. L_2[j] = L[f_2(j)]) \\ & \& (\forall j_1: \mathbb{N}_{<\|L_1\|}, j_2: \mathbb{N}_{<\|L_2\|}. \neg f_1(j_1) = f_2(j_2)) \end{aligned}$$

clarification:

interleaving_occurence($T; L_1; L_2; L; f_1; f_2$)

$$\begin{aligned} \equiv_{\text{def}} \quad & \|L\| = \|L_1\| + \|L_2\| \in \mathbb{N} \\ & \& \text{increasing}(f_1; \|L_1\|) \& (\forall j: \{0..\|L_1\|^{-}\}. L_1[j] = L[f_1(j)] \in T) \\ & \& \text{increasing}(f_2; \|L_2\|) \& (\forall j: \{0..\|L_2\|^{-}\}. L_2[j] = L[f_2(j)] \in T) \\ & \& (\forall j_1: \{0..\|L_1\|^{-}\}, j_2: \{0..\|L_2\|^{-}\}. \neg f_1(j_1) = f_2(j_2) \in \mathbb{Z}) \end{aligned}$$