

seq.1 Structural Rules

mvl:seq:str: The structural rules for n -sided sequent calculus operate as in the classical case,
sec except for each position i .

$$\frac{\Gamma_1 \mid \dots \mid \Gamma_i \mid \dots \mid \Gamma_n}{\Gamma_1 \mid \dots \mid \varphi, \Gamma_i \mid \dots \mid \Gamma_n} \text{Wi}$$
$$\frac{\Gamma_1 \mid \dots \mid \varphi, \varphi, \Gamma_i \mid \dots \mid \Gamma_n}{\Gamma_1 \mid \dots \mid \varphi, \Gamma_i \mid \dots \mid \Gamma_n} \text{Ci}$$
$$\frac{\Gamma_1 \mid \dots \mid \Gamma_i, \varphi, \psi, \Gamma'_i \mid \dots \mid \Gamma_n}{\Gamma_1 \mid \dots \mid \Gamma_i, \psi, \varphi, \Gamma'_i \mid \dots \mid \Gamma_n} \text{Xi}$$

A series of weakening, contraction, and exchange inferences will often be indicated by double inference lines.

The Cut rule comes in several forms, one for every combination of distinct positions in the sequent $i \neq j$:

$$\frac{\Gamma_1 \mid \dots \mid \varphi, \Gamma_i \mid \dots \mid \Gamma_n \quad \Delta_1 \mid \dots \mid \varphi, \Delta_j \mid \dots \mid \Delta_n}{\Gamma_1, \Delta_1 \mid \dots \mid \Gamma_n, \Delta_n} \text{Cut}_{i,j}$$

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Bibliography