

Pensieve header: Just a recycling bin.

First, we implement the Kronecker δ -function^{footnote{Only for indices in $\mathsf{t}\{\mathsf{es}\}=\{i,j,k,m\}\cup\{i,j,k,m\}^+\cup\{i,j,k,m\}^{++}$ }, because later we will sometimes want to leave $\delta_{\alpha\beta}$ ``undecided’’.}, the g -rules for a crossing (s,i,j) , and the g -rules for a list of crossings X :}

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ijkmn = i | j | k | m | n; es = ijkmn | ijkmn+ | ijkmn++;  $\delta_{\alpha:\mathsf{es},\beta:\mathsf{es}} := \text{If}[\alpha == \beta, 1, 0];$ 
gRules[{s_, i_, j_}] := { $g_{v_j\beta} \mapsto g_{vj^+\beta} + \delta_{j\beta}$ ,  $g_{v_i\beta} \mapsto T_v^s g_{vi^+\beta} + (1 - T_v^s) g_{vj^+\beta} + \delta_{i\beta}$ ,
 $g_{v_\alpha i^*} \mapsto T_v^s g_{vai} + \delta_{ai^*}$ ,  $g_{v_\alpha j^*} \mapsto g_{vaj} + (1 - T_v^s) g_{vai} + \delta_{aj^*}$ };
gRules[X___List] := Union @@ Table[gRules[c], {c, {X}}]
```