Logiweb sequent calculus, Chores

Klaus Grue

GRD-2006-06-21.UTC:11:42:14.848103

Contents

1   Test cases

2   Pyk definitions

([rule div $\overset{\text{pyk}}{\mapsto}$ "rule div"]

[S10 $\overset{\text{pyk}}{\mapsto}$ "axiom s ten"]

[Prop 3.2i $\overset{\text{pyk}}{\mapsto}$ "prop three two i"]

[Prop 3.2j$_1$ $\overset{\text{pyk}}{\mapsto}$ "prop three two j one"]

[Prop 3.2j$_2$ $\overset{\text{pyk}}{\mapsto}$ "prop three two j two"]

[Prop 3.2j $\overset{\text{pyk}}{\mapsto}$ "prop three two j"]

[Prop 3.2k$_1$ $\overset{\text{pyk}}{\mapsto}$ "prop three two k one"]

[Prop 3.2k$_2$ $\overset{\text{pyk}}{\mapsto}$ "prop three two k two"]

[Prop 3.2k $\overset{\text{pyk}}{\mapsto}$ "prop three two k"]

[Prop 3.2l$_1$ $\overset{\text{pyk}}{\mapsto}$ "prop three two l one"]

[Prop 3.2l$_2$ $\overset{\text{pyk}}{\mapsto}$ "prop three two l two"]

[Prop 3.2l $\overset{\text{pyk}}{\mapsto}$ "prop three two l"]

[Prop 3.2m$_1$ $\overset{\text{pyk}}{\mapsto}$ "prop three two m one"]

[Prop 3.2m$_2$ $\overset{\text{pyk}}{\mapsto}$ "prop three two m two"]

[Prop 3.2m $\overset{\text{pyk}}{\mapsto}$ "prop three two m"]

[Prop 3.2n₁ $\overset{\text{pyk}}{\to}$ "prop three two n one"]
[Prop 3.2n₂ $\overset{\text{pyk}}{\to}$ "prop three two n two"]
[Prop 3.2n $\overset{\text{pyk}}{\to}$ "prop three two n"]
[Prop 3.2o $\overset{\text{pyk}}{\to}$ "prop three two o"]
[Prop 3.4a₁ $\overset{\text{pyk}}{\to}$ "prop three four a one"]
[Prop 3.4a₂ $\overset{\text{pyk}}{\to}$ "prop three four a two"]
[Prop 3.4a $\overset{\text{pyk}}{\to}$ "prop three four a"]
[Prop 3.4b $\overset{\text{pyk}}{\to}$ "prop three four b"]
[Prop 3.4c₁ $\overset{\text{pyk}}{\to}$ "prop three four c one"]
[Prop 3.4c₂ $\overset{\text{pyk}}{\to}$ "prop three four c two"]
[Prop 3.4c $\overset{\text{pyk}}{\to}$ "prop three four c"]
[Prop 3.4d₁ $\overset{\text{pyk}}{\to}$ "prop three four d one"]
[Prop 3.4d₂ $\overset{\text{pyk}}{\to}$ "prop three four d two"]
[Prop 3.4d $\overset{\text{pyk}}{\to}$ "prop three four d"]
[∗∥∗ $\overset{\text{pyk}}{\to}$ "" divides ""]
[pogave $\overset{\text{pyk}}{\to}$ "pogave"]
)ᴾ

3 TₑX definitions

[S10 $\overset{\text{tex}}{=}$ "
            S10"]

[Prop 3.2i $\overset{\text{tex}}{=}$ "
            Prop\ 3.2i"]

[Prop 3.2j $\overset{\text{tex}}{=}$ "
            Prop\ 3.2j"]

[Prop 3.2j₁ $\overset{\text{tex}}{=}$ "
            Prop\ 3.2j_1"]

[Prop 3.2j₂ $\overset{\text{tex}}{=}$ "
            Prop\ 3.2j_2"]

[Prop 3.2k $\overset{\text{tex}}{=}$ "
            Prop\ 3.2k"]

[Prop 3.2k₁ $\overset{\text{tex}}{=}$ "
            Prop\ 3.2k_1"]

[Prop 3.2k$_2$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2k_2"]

[Prop 3.2l $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2l"]

[Prop 3.2l$_1$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2l_1"]

[Prop 3.2l$_2$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2l_2"]

[Prop 3.2m $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2m"]

[Prop 3.2m$_1$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2m_1"]

[Prop 3.2m$_2$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2m_2"]

[Prop 3.2n $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2n"]

[Prop 3.2n$_1$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2n_1"]

[Prop 3.2n$_2$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2n_2"]

[Prop 3.2o $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.2o"]

[Prop 3.4a$_1$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.4a_1"]

[Prop 3.4a$_2$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.4a_2"]

[Prop 3.4a $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.4a"]

[Prop 3.4b $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.4b"]

[Prop 3.4c$_1$ $\stackrel{\text{tex}}{=}$ "
          Prop\ 3.4c_1"]

[Prop 3.4c$_2$ $\overset{\text{tex}}{=}$ "
                    Prop\ 3.4c_2"]

[Prop 3.4c $\overset{\text{tex}}{=}$ "
                    Prop\ 3.4c"]

[Prop 3.4d$_1$ $\overset{\text{tex}}{=}$ "
                    Prop\ 3.4d_1"]

[Prop 3.4d$_2$ $\overset{\text{tex}}{=}$ "
                    Prop\ 3.4d_2"]

[Prop 3.4d $\overset{\text{tex}}{=}$ "
                    Prop\ 3.4d"]

[x‖y $\overset{\text{tex}}{=}$ "#1.
                    \| #2."]

3.1 Variables

4 Priority table

Priority table
Preassociative
[pogave], [base], [bracket $*$ end bracket], [big bracket $*$ end bracket], [$\$ * \$$],
[**flush left** [$*$]], [x], [y], [z], [[$* \bowtie *$]], [[$* \overset{*}{\to} *$]], [pyk], [tex], [name], [prio], [$*$], [T],
[if$(*, *, *)$], [[$* \overset{*}{\Rightarrow} *$]], [val], [claim], [$\bot$], [f$(*)$], [$(*)^{\text{I}}$], [F], [$\underline{0}$], [$\underline{1}$], [$\underline{2}$], [$\underline{3}$], [$\underline{4}$], [$\underline{5}$], [$\underline{6}$],
[$\underline{7}$], [$\underline{8}$], [$\underline{9}$], [0], [1], [2], [3], [4], [5], [6], [7], [8], [9], [a], [b], [c], [d], [e], [f], [g], [h], [i], [j],
[k], [l], [m], [n], [o], [p], [q], [r], [s], [t], [u], [v], [w], [$(*)^{\text{M}}$], [If$(*, *, *)$],
[array$\{*\}$ $*$ end array], [l], [c], [r], [empty], [$\langle * \mid * := * \rangle$], [$\mathcal{M}(*)$], [$\tilde{\mathcal{U}}(*)$], [$\mathcal{U}(*)$],
[$\mathcal{U}^{\text{M}}(*)$], [**apply**$(*, *)$], [**apply**$_1(*, *)$], [identifier$(*)$], [identifier$_1(*, *)$], [array-
plus$(*, *)$], [array-remove$(*, *, *)$], [array-put$(*, *, *, *)$], [array-add$(*, *, *, *, *)$],
[bit$(*, *)$], [bit$_1(*, *)$], [rack], ["vector"], ["bibliography"], ["dictionary"],
["body"], ["codex"], ["expansion"], ["code"], ["cache"], ["diagnose"], ["pyk"],
["tex"], ["texname"], ["value"], ["message"], ["macro"], ["definition"],
["unpack"], ["claim"], ["priority"], ["lambda"], ["apply"], ["true"], ["if"],
["quote"], ["proclaim"], ["define"], ["introduce"], ["hide"], ["pre"], ["post"],
[$\mathcal{E}(*, *, *)$], [$\mathcal{E}_2(*, *, *, *, *)$], [$\mathcal{E}_3(*, *, *, *)$], [$\mathcal{E}_4(*, *, *, *)$], [**lookup**$(*, *, *)$],
[**abstract**$(*, *, *, *)$], [[$\ulcorner *\urcorner$]], [$\mathcal{M}(*, *, *)$], [$\mathcal{M}_2(*, *, *, *)$], [$\mathcal{M}^*(*, *, *)$], [macro],
[s$_0$], [**zip**$(*, *)$], [**assoc**$_1(*, *, *)$], [$(*)^{\text{P}}$], [self], [[$* \overset{..}{=} *$]], [[$* \overset{.}{=} *$]], [[$* \overset{-}{=} *$]],
[[$* \overset{\text{pyk}}{=} *$]], [[$* \overset{\text{tex}}{=} *$]], [[$* \overset{\text{name}}{=} *$]], [**Priority table**[$*$]], [$\tilde{\mathcal{M}}_1$], [$\tilde{\mathcal{M}}_2(*)$], [$\tilde{\mathcal{M}}_3(*)$],
[$\tilde{\mathcal{M}}_4(*, *, *, *)$], [$\mathcal{M}(*, *, *)$], [$\tilde{\mathcal{Q}}(*, *, *)$], [$\tilde{\mathcal{Q}}_2(*, *, *)$], [$\tilde{\mathcal{Q}}_3(*, *, *, *)$], [$\tilde{\mathcal{Q}}^*(*, *, *)$],
[$(*)$], [$($*$)$], [display$(*)$], [statement$(*)$], [[$*\urcorner$]], [[$*$]$^-$], [**aspect**$(*, *)$],
[**aspect**$(*, *, *)$], [$\langle * \rangle$], [**tuple**$_1(*)$], [**tuple**$_2(*)$], [let$_2(*, *)$], [let$_1(*, *)$],
[[$* \overset{\text{claim}}{=} *$]], [checker], [**check**$(*, *)$], [**check**$_2(*, *, *)$], [**check**$_3(*, *, *)$],

4

[**check**$^*(*, *)$], [**check**$_2^*(*, *, *)$], [[$*$]˙], [[$*$]$^-$], [[$*$]$^\circ$], [msg], [[$* \overset{\text{msg}}{=} *$]], [<stmt>],
[stmt], [[$* \overset{\text{stmt}}{=} *$]], [HeadNil′], [HeadPair′], [Transitivity′], [⊥⊥], [Contra′], [T′$_E$],
[L$_1$], [$\underline{*}$], [$\mathcal{A}$], [$\mathcal{B}$], [$\mathcal{C}$], [$\mathcal{D}$], [$\mathcal{E}$], [$\mathcal{F}$], [$\mathcal{G}$], [$\mathcal{H}$], [$\mathcal{I}$], [$\mathcal{J}$], [$\mathcal{K}$], [$\mathcal{L}$], [$\mathcal{M}$], [$\mathcal{N}$], [$\mathcal{O}$], [$\mathcal{P}$], [$\mathcal{Q}$],
[$\mathcal{R}$], [$\mathcal{S}$], [$\mathcal{T}$], [$\mathcal{U}$], [$\mathcal{V}$], [$\mathcal{W}$], [$\mathcal{X}$], [$\mathcal{Y}$], [$\mathcal{Z}$], [⟨$*$ | $* :=*$⟩], [⟨$^*\!*$ | $* :=*$⟩], [∅], [Remainder],
[$(*)^{\mathbf{v}}$], [intro$(*, *, *, *)$], [intro$(*, *, *)$], [error$(*, *)$], [error$_2(*, *)$], [proof$(*, *, *)$],
[proof$_2(*, *)$], [$\mathcal{S}(*, *)$], [$\mathcal{S}^I(*, *)$], [$\mathcal{S}^\triangleright(*, *)$], [$\mathcal{S}_1^\triangleright(*, *, *)$], [$\mathcal{S}^E(*, *)$], [$\mathcal{S}_1^E(*, *, *)$],
[$\mathcal{S}^+(*, *)$], [$\mathcal{S}_1^+(*, *, *)$], [$\mathcal{S}^-(*, *)$], [$\mathcal{S}_1^-(*, *, *)$], [$\mathcal{S}^*(*, *)$], [$\mathcal{S}_1^*(*, *, *)$],
[$\mathcal{S}_2^*(*, *, *, *)$], [$\mathcal{S}^@(*, *)$], [$\mathcal{S}_1^@(*, *, *)$], [$\mathcal{S}^\vdash(*, *)$], [$\mathcal{S}_1^\vdash(*, *, *)$], [$\mathcal{S}^\Vdash(*, *)$],
[$\mathcal{S}_1^\Vdash(*, *, *)$], [$\mathcal{S}^{\text{i.e.}}(*, *)$], [$\mathcal{S}_1^{\text{i.e.}}(*, *, *)$], [$\mathcal{S}_2^{\text{i.e.}}(*, *, *, *)$], [$\mathcal{S}^\forall(*, *)$],
[$\mathcal{S}_1^\forall(*, *, *)$], [$\mathcal{S}^;(*, *)$], [$\mathcal{S}_1^;(*, *, *)$], [$\mathcal{S}_2^;(*, *, *)$], [$\mathcal{T}(*)$], [claims$(*, *, *)$],
[claims$_2(*, *, *)$], [<proof>], [proof], [[**Lemma** $*$: $*$]], [[**Proof of** $*$: $*$]],
[[$*$ **lemma** $*$: $*$]], [[$*$ **antilemma** $*$: $*$]], [[$*$ **rule** $*$: $*$]], [[$*$ **antirule** $*$: $*$]],
[verifier], [$\mathcal{V}_1(*)$], [$\mathcal{V}_2(*, *)$], [$\mathcal{V}_3(*, *, *, *)$], [$\mathcal{V}_4(*, *)$], [$\mathcal{V}_5(*, *, *)$], [$\mathcal{V}_6(*, *, *, *)$],
[$\mathcal{V}_7(*, *, *, *)$], [Cut$(*, *)$], [Head$_\oplus(*)$], [Tail$_\oplus(*)$], [rule$_1(*, *)$], [rule$(*, *)$],
[Rule tactic], [Plus$(*, *)$], [[**Theory** $*$]], [theory$_2(*, *)$], [theory$_3(*, *)$],
[theory$_4(*, *)$], [HeadNil″], [HeadPair″], [Transitivity″], [Contra″], [HeadNil],
[HeadPair], [Transitivity], [Contra], [T$_E$], [ragged right],
[ragged right expansion], [parm$(*, *, *)$], [parm$^*(*, *, *)$], [inst$(*, *)$],
[inst$^*(*, *)$], [occur$(*, *, *)$], [occur$^*(*, *, *)$], [unify$(* = *, *)$], [unify$^*(* = *, *)$],
[unify$_2(* = *, *)$], [L$_a$], [L$_b$], [L$_c$], [L$_d$], [L$_e$], [L$_f$], [L$_g$], [L$_h$], [L$_i$], [L$_j$], [L$_k$], [L$_l$], [L$_m$],
[L$_n$], [L$_o$], [L$_p$], [L$_q$], [L$_r$], [L$_s$], [L$_t$], [L$_u$], [L$_v$], [L$_w$], [L$_x$], [L$_y$], [L$_z$], [L$_A$], [L$_B$], [L$_C$],
[L$_D$], [L$_E$], [L$_F$], [L$_G$], [L$_H$], [L$_I$], [L$_J$], [L$_K$], [L$_L$], [L$_M$], [L$_N$], [L$_O$], [L$_P$], [L$_Q$], [L$_R$],
[L$_S$], [L$_T$], [L$_U$], [L$_V$], [L$_W$], [L$_X$], [L$_Y$], [L$_Z$], [L$_?$], [Reflexivity], [Reflexivity$_1$],
[Commutativity], [Commutativity$_1$], [<tactic>], [tactic], [[$* \overset{\text{tactic}}{=} *$]], [$\mathcal{P}(*, *, *)$],
[$\mathcal{P}^*(*, *, *)$], [p$_0$], [conclude$_1(*, *)$], [conclude$_2(*, *, *)$], [conclude$_3(*, *, *, *)$],
[conclude$_4(*, *)$], [check], [[$* \overset{\circ}{=} *$]], [RootVisible$(*)$], [A], [R], [C], [T], [L], [{$*$}], [$\overline{*}$],
[a], [b], [c], [d], [e], [f], [g], [h], [i], [j], [k], [l], [m], [n], [o], [p], [q], [r], [s], [t], [u], [v],
[w], [x], [y], [z], [⟨$*\!\equiv *$ | $* :=*$⟩], [⟨$*\!\equiv^0 *$ | $* :=*$⟩], [⟨$*\!\equiv^1 *$ | $* :=*$⟩], [⟨$*\!\equiv^* *$ | $* :=*$⟩],
[Ded$(*, *)$], [Ded$_0(*, *)$], [Ded$_1(*, *, *)$], [Ded$_2(*, *, *)$], [Ded$_3(*, *, *, *)$],
[Ded$_4(*, *, *, *)$], [Ded$_4^*(*, *, *, *)$], [Ded$_5(*, *, *)$], [Ded$_6(*, *, *, *)$],
[Ded$_6^*(*, *, *, *)$], [Ded$_7(*)$], [Ded$_8(*, *)$], [Ded$_8^*(*, *)$], [S], [Neg], [MP], [Gen],
[Ded], [S1], [S2], [S3], [S4], [S5], [S6], [S7], [S8], [S9], [Repetition], [A1′], [A2′], [A4′],
[A5′], [Prop 3.2a], [Prop 3.2b], [Prop 3.2c], [Prop 3.2d], [Prop 3.2e$_1$], [Prop 3.2e$_2$],
[Prop 3.2e], [Prop 3.2f$_1$], [Prop 3.2f$_2$], [Prop 3.2f], [Prop 3.2g$_1$], [Prop 3.2g$_2$],
[Prop 3.2g], [Prop 3.2h$_1$], [Prop 3.2h$_2$], [Prop 3.2h], [Block$_1(*, *, *)$], [Block$_2(*)$],
[rule div], [S10], [Prop 3.2i], [Prop 3.2j$_1$], [Prop 3.2j$_2$], [Prop 3.2j], [Prop 3.2k$_1$],
[Prop 3.2k$_2$], [Prop 3.2k], [Prop 3.2l$_1$], [Prop 3.2l$_2$], [Prop 3.2l], [Prop 3.2m$_1$],
[Prop 3.2m$_2$], [Prop 3.2m], [Prop 3.2n$_1$], [Prop 3.2n$_2$], [Prop 3.2n], [Prop 3.2o],
[Prop 3.4a$_1$], [Prop 3.4a$_2$], [Prop 3.4a], [Prop 3.4b], [Prop 3.4c$_1$], [Prop 3.4c$_2$],
[Prop 3.4c], [Prop 3.4d$_1$], [Prop 3.4d$_2$], [Prop 3.4d];

Preassociative

[$*_-${$*$}], [$*$/indexintro$(*, *, *, *)$], [$*$/intro$(*, *, *)$], [$*$/bothintro$(*, *, *, *, *)$],
[$*$/nameintro$(*, *, *, *)$], [$*$′], [$*$[$*$]], [$*$[$*\!\rightarrow\!*$]], [$*$[$*\!\Rightarrow\!*$]], [$*$0], [$*$1], [0b], [$*$-color$(*)$],
[$*$-color$^*(*)$], [$*^H$], [$*^T$], [$*^U$], [$*^h$], [$*^t$], [$*^s$], [$*^c$], [$*^d$], [$*^a$], [$*^C$], [$*^M$], [$*^B$], [$*^r$], [$*^i$],
[$*^d$], [$*^R$], [$*^0$], [$*^1$], [$*^2$], [$*^3$], [$*^4$], [$*^5$], [$*^6$], [$*^7$], [$*^8$], [$*^9$], [$*^E$], [$*^\mathcal{V}$], [$*^\mathcal{C}$], [$*^{\mathcal{C}^*}$],

$[*^{\mathrm{hide}}]$;

Preassociative

$[``*"], [], [(*)^{\mathbf{t}}], [\mathrm{string}(*) + *], [\mathrm{string}(*) ++ *], [$

$*], [\ *], [!*], ["*], [\#*], [\$*], [\%*], [\&*], ['*], [(*], [)*], [**], [+*], [, *], [\text{-}*], [.*], [/*],$

$[0*], [1*], [2*], [3*], [4*], [5*], [6*], [7*], [8*], [9*], [:*], [; *], [<*], [=*], [>*], [?*],$

$[@*], [A*], [B*], [C*], [D*], [E*], [F*], [G*], [H*], [I*], [J*], [K*], [L*], [M*], [N*],$

$[O*], [P*], [Q*], [R*], [S*], [T*], [U*], [V*], [W*], [X*], [Y*], [Z*], [[*], [\backslash*], []*], [\hat{\ }*],$

$[\_*], [`*], [a*], [b*], [c*], [d*], [e*], [f*], [g*], [h*], [i*], [j*], [k*], [l*], [m*], [n*], [o*],$

$[p*], [q*], [r*], [s*], [t*], [u*], [v*], [w*], [x*], [y*], [z*], [\{*], [|*], [\}*], [\tilde{\ }*],$

$[\mathbf{Preassociative}\ *; *], [\mathbf{Postassociative}\ *; *], [[*], *], [\mathrm{priority}\ * \ \mathrm{end}],$

$[\mathrm{newline}\ *], [\mathrm{macro\ newline}\ *], [\mathrm{MacroIndent}(*)]$;

Preassociative

$[*\ '\ *], [*\ `\ *]$;

Preassociative

$[*']$;

Preassociative

$[*\cdot *], [*\cdot_0 *]$;

Preassociative

$[* + *], [* +_0 *], [* +_1 *], [* - *], [* -_0 *], [* -_1 *]$;

Preassociative

$[* \cup \{*\}], [* \cup *], [*\backslash\{*\}]$;

Postassociative

$[* \therefore *], [* \therefore\mkern-10mu\cdot\ *], [* \because\mkern-10mu\cdot\ *], [*\ \underline{+2*}\ *], [* :: *], [* +2* *]$;

Postassociative

$[*, *]$;

Postassociative

$[* \overset{\mathrm{B}}{\approx} *], [* \overset{\mathrm{D}}{\approx} *], [* \overset{\mathrm{C}}{\approx} *], [* \overset{\mathrm{P}}{\approx} *], [* \approx *], [* = *], [* \overset{+}{\rightarrow} *], [* \overset{\mathrm{t}}{=} *], [* \overset{\mathrm{t}^*}{=} *], [* \overset{\mathrm{r}}{=} *],$

$[* \in_t *], [* \subseteq_{\mathrm{T}} *], [* \overset{\mathrm{T}}{=} *], [* \overset{\mathrm{s}}{=} *], [* \mathrm{free\ in} *], [* \mathrm{free\ in}^* *], [* \mathrm{free\ for} * \mathrm{in} *],$

$[* \mathrm{free\ for}^* * \mathrm{in} *], [* \in_c *], [* < *], [* <' *], [* \leq' *], [* = *], [* \neq *], [*^{\mathrm{var}}],$

$[*\#^0*], [*\#^1*], [*\#^**]$;

Preassociative

$[\neg*]$;

Preassociative

$[* \wedge *], [* \ddot{\wedge} *], [* \tilde{\wedge} *], [* \wedge_c *]$;

Preassociative

$[* \vee *], [* \| *], [* \ddot{\vee} *]$;

Preassociative

$[\exists*\!: *], [\forall*\!: *], [\forall_{\mathrm{obj}}*\!: *]$;

Postassociative

$[* \Rrightarrow *], [* \Rightarrow *], [* \Leftrightarrow *]$;

Postassociative

$[* : *], [* \mathrm{spy} *], [*!*]$;

Preassociative

$[* \left\{ \begin{array}{c} * \\ * \end{array} \right.$];

Preassociative
$[\lambda * .*], [\Lambda * .*], [\Lambda*], [\mathbf{if} \ * \ \mathbf{then} \ * \ \mathbf{else} \ *], [\mathbf{let} \ * = * \ \mathbf{in} \ *], [\mathbf{let} \ * \overset{.}{=} * \ \mathrm{in} \ *];$
Preassociative
$[*\#*];$
Preassociative
$[*^{\mathrm{I}}], [*^{\triangleright}], [*^{\mathrm{V}}], [*^{+}], [*^{-}], [*^{*}];$
Preassociative
$[* @ *], [* \triangleright *], [* \blacktriangleright *], [* \gg *], [* \unrhd *];$
Postassociative
$[* \vdash *], [* \Vdash *], [* \ \mathrm{i.e.} \ *];$
Preassociative
$[\forall *{:} *], [\Pi *{:} *];$
Postassociative
$[* \oplus *];$
Postassociative
$[*; *];$
Preassociative
$[* \ \mathrm{proves} \ *];$
Preassociative
$[* \ \mathbf{proof \ of} \ * : *], [\mathrm{Line} * : * \gg *; *], [\mathrm{Last \ line} * \gg * \ \square],$
$[\mathrm{Line} * : \mathrm{Premise} \gg *; *], [\mathrm{Line} * : \mathrm{Side\text{-}condition} \gg *; *], [\mathrm{Arbitrary} \gg *; *],$
$[\mathrm{Local} \gg * = *; *], [\mathrm{Begin} *; * : \mathrm{End}; *], [\mathrm{Last \ block \ line} * \gg *;],$
$[\mathrm{Arbitrary} \gg *; *];$
Postassociative
$[* \mid *];$
Postassociative
$[* , *], [*[*]*];$
Preassociative
$[*\&*], [\rightarrow];$
Preassociative
$[*\backslash\backslash*], [* \ \mathrm{linebreak}[4] \ *], [*\backslash\backslash*], [*\|*];$ **End table**