Lógica Computacional

Universidade da Beira Interior

Formulário : Dedução Natural

$$axioma\ \frac{}{\Gamma, A \vdash A} \qquad elim_{\bot}\ \frac{\Gamma \vdash \bot}{\Gamma \vdash A}$$

$$intro_{\rightarrow}\ \frac{\Gamma, A \vdash B}{\Gamma \vdash A \rightarrow B} \qquad elim_{\rightarrow}\ \frac{\Gamma \vdash A \quad \Gamma \vdash A \rightarrow B}{\Gamma \vdash B}$$

$$intro_{\wedge}\ \frac{\Gamma \vdash A \quad \Gamma \vdash B}{\Gamma \vdash A \wedge B} \qquad elim_{\wedge 1}\ \frac{\Gamma \vdash A \wedge B}{\Gamma \vdash A}$$

$$elim_{\wedge 2}\ \frac{\Gamma \vdash A \wedge B}{\Gamma \vdash B}$$

$$intro_{\vee 1}\ \frac{\Gamma \vdash A}{\Gamma \vdash A \vee B} \qquad intro_{\vee 2}\ \frac{\Gamma \vdash B}{\Gamma \vdash A \vee B}$$

$$elim_{\vee}\ \frac{\Gamma \vdash A \vee B \quad \Gamma, A \vdash C \quad \Gamma, B \vdash C}{\Gamma \vdash C}$$

$$intro_{\neg}\ \frac{\Gamma, A \vdash \bot}{\Gamma \vdash \neg A} \qquad elim_{\neg}\ \frac{\Gamma \vdash A \quad \Gamma \vdash \neg A}{\Gamma \vdash \bot}$$

$$\text{RAA}\ \frac{\Gamma, \neg A \vdash \bot}{\Gamma \vdash A}$$