Bounded Linear Logic

Supports the following data-usage constraints:

• none to tons

Time complexity!

(Simplified) Bounded Linear Logic

$$\frac{\Gamma_1, \Gamma_2 \vdash B}{\Gamma_1, !_0 A, \Gamma_2 \vdash B} \ W$$

$$\frac{\Gamma_1, !_{p_1} A, !_{p_2} A, \Gamma_2 \vdash B}{\Gamma_1, !_{p_1+p_2} A, \Gamma_2 \vdash B} \ C$$

$$\frac{!_{\overrightarrow{p}} \Gamma \vdash B}{!_{p * \overrightarrow{p}} \Gamma \vdash !_p B} \ P$$

$$\frac{\Gamma, A \vdash B}{\Gamma, !_1 A \vdash B} \ D$$