

The T_EXPower bundle

`\stepwise` Example: An Aligned Equation

Stephan Lehmke

University of Dortmund

Department of Computer Science I

`mailto:Stephan.Lehmke@udo.edu`

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$$\min \left(\max \left(\begin{matrix} \vdots \\ \vdots \end{matrix}, \begin{matrix} \vdots \\ \vdots \end{matrix} \right), \begin{matrix} \vdots \\ \vdots \end{matrix} \right) \quad (1)$$

$$\min \left(\max \left(\begin{matrix} \min \left(F'(x), \min \left(F_1(x), G_1(y) \right) \right) \\ \vdots \end{matrix} \right), \right. \qquad \qquad \qquad \left. \right) \tag{1}$$

$$\min \left(\max \left(\begin{matrix} \min \left(F'(x), \min \left(F_1(x), G_1(y) \right) \right), \\ \vdots \\ \min \left(F'(x), \min \left(F_n(x), G_n(y) \right) \right) \end{matrix} \right), \right) \tag{1}$$

$$\min \left(\max \left(\begin{matrix} \min \left(F'(x), \min \left(F_1(x), G_1(y) \right) \right) \\ \vdots \\ \min \left(F'(x), \min \left(F_n(x), G_n(y) \right) \right) \end{matrix} \right), \min \left(G_i(y), H_i(z) \right) \right) \tag{1}$$

$$\min \left(\max \left(\begin{matrix} \min \left(F'(x), \min \left(F_1(x), G_1(y) \right) \right) \\ \vdots \\ \min \left(F'(x), \min \left(F_n(x), G_n(y) \right) \right) \end{matrix} \right), \min \left(G_i(y), H_i(z) \right) \right) \tag{1}$$

$$= \max \left(\begin{matrix} \min \left(\min \left(, \min \left(, \min \left(\right) \right) \right), \min \left(G_i(y), H_i(z) \right) \right) \\ \vdots \\ \min \left(\min \left(, \min \left(, \min \left(\right) \right) \right), \min \left(G_i(y), H_i(z) \right) \right) \end{matrix} \right) \tag{2}$$

$$= \max \left(\begin{matrix} \min \left(\min \left(, \min \left(, \min \left(, G_i(y) \right) \right) \right), H_i(z) \right) \\ \vdots \\ \min \left(\min \left(, \min \left(, \min \left(, G_i(y) \right) \right) \right), H_i(z) \right) \end{matrix} \right) \tag{3}$$

$$\min \left(\max \left(\begin{array}{c} \min \left(F'(x), \min \left(F_1(x), G_1(y) \right) \right) \\ \vdots \\ \min \left(F'(x), \min \left(F_n(x), G_n(y) \right) \right) \end{array} \right), \min \left(G_i(y), H_i(z) \right) \right) \quad (1)$$

$$= \max \left(\begin{array}{c} \min \left(\min \left(F'(x), \min \left(F_1(x), G_1(y) \right) \right), \min \left(G_i(y), H_i(z) \right) \right) \\ \vdots \\ \min \left(\min \left(F'(x), \min \left(F_n(x), G_n(y) \right) \right), \min \left(G_i(y), H_i(z) \right) \right) \end{array} \right) \quad (2)$$

$$= \max \left(\begin{array}{c} \min \left(\min \left(F'(x), \min \left(F_1(x), \min \left(G_1(y), G_i(y) \right) \right) \right), H_i(z) \right) \\ \vdots \\ \min \left(\min \left(F'(x), \min \left(F_n(x), \min \left(G_n(y), G_i(y) \right) \right) \right), H_i(z) \right) \end{array} \right) \quad (3)$$

$$\min \left(\max \begin{pmatrix} \min \left(F'(x), \min \left(F_1(x), G_1(y) \right) \right) \\ \vdots \\ \min \left(F'(x), \min \left(F_n(x), G_n(y) \right) \right) \end{pmatrix}, \min \left(G_i(y), H_i(z) \right) \right) \quad (1)$$

$$= \max \begin{pmatrix} \min \left(\min \left(F'(x), \min \left(F_1(x), G_1(y) \right) \right), \min \left(G_i(y), H_i(z) \right) \right) \\ \vdots \\ \min \left(\min \left(F'(x), \min \left(F_n(x), G_n(y) \right) \right), \min \left(G_i(y), H_i(z) \right) \right) \end{pmatrix} \quad (2)$$

$$= \max \begin{pmatrix} \min \left(\min \left(F'(x), \min \left(F_1(x), \min \left(G_1(y), G_i(y) \right) \right) \right), H_i(z) \right) \\ \vdots \\ \min \left(\min \left(F'(x), \min \left(F_n(x), \min \left(G_n(y), G_i(y) \right) \right) \right), H_i(z) \right) \end{pmatrix} \quad (3)$$

$$= \min \left(F'(x), \min \left(\max \begin{pmatrix} \min \left(F_1(x), \min \left(G_1(y), G_i(y) \right) \right) \\ \vdots \\ \min \left(F_n(x), \min \left(G_n(y), G_i(y) \right) \right) \end{pmatrix}, H_i(z) \right) \right) \quad (4)$$