

$$\mathcal{C}|\mathbb{F} \times \Gamma = \left\{ \mathbb{J} = \frac{\mathbb{A} \mid \mathbb{A} \Gamma}{\mathbb{J}} \right\} = {}^{m+n} \mathcal{C} \mathbb{K}_{m+n}$$

$$\mathcal{D}|\mathbb{F} \times \Gamma = \left\{ \mathbb{J} = \frac{\mathbb{A} \mid \mathbb{A} \Gamma}{\mathbb{J}} \right\} = {}^{m+n} \mathcal{D} \mathbb{K}_{m+n}$$

$$\mathcal{U}|\mathbb{F}:\Gamma = \frac{\mathbb{J} = \frac{\mathbb{A} \mid \mathbb{A} \Gamma}{\mathbb{J}}}{\frac{\mathbb{A} \mid 0}{0 \mid 1} = \mathbb{J} \frac{\mathbb{A} \mid 0}{0 \mid 1} \mathbb{J}^* = \frac{\mathbb{A} \mathbb{A}^* \mathbb{A} + \mathbb{A} \mathbb{A}^* \Gamma \mid \mathbb{A} \mathbb{A}^* \mathbb{J} + \mathbb{A} \mathbb{A}^* \mathbb{J}^*}{\mathbb{A} \mathbb{A}^* \mathbb{A} + \mathbb{A} \mathbb{A}^* \Gamma \mid \mathbb{A} \mathbb{A}^* \mathbb{J} + \mathbb{A} \mathbb{A}^* \mathbb{J}^*}} = {}^{m:n} \mathcal{U} \mathbb{K}_{m:n}$$

$$\mathcal{V}|\mathbb{F}:\Gamma = \frac{\mathbb{J} = \frac{\mathbb{A} \mid \mathbb{A} \Gamma}{-\mathbb{A} \mathbb{A}^* \mid \mathbb{J}}}{\mathbb{A} + \mathbb{A}^* = 0 = \mathbb{J} + \mathbb{J}^*} = {}^{m:n} \mathcal{V} \mathbb{K}_{m:n}$$

$$\mathcal{C}/\Omega|\Gamma \times \Gamma = \frac{\mathbb{J} = \frac{\mathbb{A} \mid \mathbb{A} \Gamma}{\mathbb{J}}}{\frac{0 \mid \varepsilon *}{* \mid 0} = \mathbb{J} \frac{0 \mid \varepsilon *}{* \mid 0} \mathbb{J}^* = \frac{\mathbb{A} \mathbb{A}^* \mathbb{A} + \varepsilon \mathbb{A} \mathbb{A}^* \Gamma \mid \mathbb{A} \mathbb{A}^* \mathbb{J} + \varepsilon \mathbb{A} \mathbb{A}^* \mathbb{J}^*}{\mathbb{A} \mathbb{A}^* \mathbb{A} + \varepsilon \mathbb{A} \mathbb{A}^* \Gamma \mid \mathbb{A} \mathbb{A}^* \mathbb{J} + \varepsilon \mathbb{A} \mathbb{A}^* \mathbb{J}^*}} = {}^{2n} \mathcal{C} \mathbb{K}_{2n}^{\mathcal{C}/\Omega}$$

$$\mathcal{D}/\Omega|\Gamma \times \Gamma = \frac{\mathbb{J} = \frac{-\mathbb{J} \mid \mathbb{A} \Gamma}{\mathbb{J}}}{\mathbb{A} + \varepsilon \mathbb{A}^* = 0 = \varepsilon \mathbb{J} + \mathbb{J}^*} = {}^{2n} \mathcal{D} \mathbb{K}_{2n}^{\mathcal{D}/\Omega}$$

$$\mathcal{C}/\Omega|\Gamma \times \Gamma \cap \mathcal{U}|\Gamma:\Gamma$$

$${}^{2n} \mathcal{C} \mathbb{K}_{2n}^{\mathcal{C}/\Omega} \cap {}^{n:n} \mathcal{U} \mathbb{K}_{n:n}$$

$$\mathcal{D}/\Omega|\Gamma \times \Gamma \cap \mathcal{V}|\Gamma:\Gamma$$

$${}^{2n} \mathcal{D} \mathbb{K}_{2n}^{\mathcal{D}/\Omega} \cap {}^{n:n} \mathcal{V} \mathbb{K}_{n:n}$$

$$\mathbb{L} = \frac{\delta \mid \mathbb{L} \mid \gamma}{\mathbb{L} \mid \mathbb{L} \mid \mathbb{L}}$$

$$\mathcal{C}|\mathbb{K} \times \mathbb{L} \times \mathbb{K} = \frac{\frac{* \mid 0 \mid 0}{0 \mid * \mid 0} = \mathbb{L} \frac{* \mid 0 \mid 0}{0 \mid * \mid 0} \mathbb{L}^* = \frac{\gamma \delta + \mathbb{L} \mathbb{L}^t + \delta \gamma \mid \gamma \mathbb{L}^t + \mathbb{L} \mathbb{L}^t + \delta \mathbb{L}^t \mid \gamma \beta + \mathbb{L} \mathbb{L}^t + \delta \alpha}{\mathbb{L} \delta + \mathbb{L} \mathbb{L}^t + \mathbb{L} \gamma \mid \mathbb{L} \mathbb{L}^t + \mathbb{L} \mathbb{L}^t + \mathbb{L} \mathbb{L}^t \mid \mathbb{L} \beta + \mathbb{L} \mathbb{L}^t + \mathbb{L} \alpha *}{\alpha \delta + \mathbb{L} \mathbb{L}^t + \beta \gamma \mid \alpha \mathbb{L}^t + \mathbb{L} \mathbb{L}^t + \beta \mathbb{L}^t \mid \alpha \beta + \mathbb{L} \mathbb{L}^t + \beta \alpha}} = {}_{1+n+1} \mathcal{C} \mathbb{K}^{1+n+1}$$

$$\mathcal{D}|\mathbb{K} \times \mathbb{L} \times \mathbb{K} = \frac{\frac{-\alpha \mid \mathbb{L} \mid 0}{\mathbb{L} \mid \mathbb{L} \mid -\mathbb{L}^t}}{0 \mid -\mathbb{L}^t \mid \alpha} = {}_{1+n+1} \mathcal{D} \mathbb{K}^{1+n+1}$$

$$\mathbb{L} + \mathbb{L}^t = 0$$

$$\mathfrak{L} = \begin{array}{c|c|c} \delta & \mathfrak{L} & \gamma \\ \hline \mathfrak{T} & \mathfrak{T} & \mathfrak{T} \\ \hline \beta & \mathfrak{L} & \alpha \end{array}$$

$$\mathfrak{U}_{|\mathbb{K}: \mathfrak{L}: \mathbb{K}} = \frac{\begin{array}{c|c|c} 1 & 0 & 0 \\ \hline 0 & \varkappa & 0 \\ \hline 0 & 0 & 1 \end{array}}{\begin{array}{c|c|c} 1 & 0 & 0 \\ \hline 0 & \varkappa & 0 \\ \hline 0 & 0 & 1 \end{array}} = \mathfrak{L} \frac{\begin{array}{c|c|c} 1 & 0 & 0 \\ \hline 0 & \varkappa & 0 \\ \hline 0 & 0 & 1 \end{array}}{\begin{array}{c|c|c} 1 & 0 & 0 \\ \hline 0 & \varkappa & 0 \\ \hline 0 & 0 & 1 \end{array}} \mathfrak{L}^* = \frac{\begin{array}{c|c|c} \delta\delta^* + \varkappa\mathfrak{L}\mathfrak{L}^* + \gamma\gamma^* & \delta\mathfrak{T}^* + \varkappa\mathfrak{L}\mathfrak{T}^* + \gamma\mathfrak{T}^* & \delta\beta + \varkappa\mathfrak{L}\mathfrak{L}^* + \gamma\alpha^* \\ \hline \mathfrak{T}\delta^* + \varkappa\mathfrak{T}\mathfrak{L}^* + \mathfrak{T}\gamma^* & \mathfrak{T}\mathfrak{T}^* + \varkappa\mathfrak{T}\mathfrak{T}^* + \mathfrak{T}\mathfrak{T}^* & \mathfrak{T}\beta^* + \varkappa\mathfrak{T}\mathfrak{L}^* + \mathfrak{T}\alpha^* \\ \hline \beta\delta^* + \varkappa\mathfrak{L}\mathfrak{L}^* + \alpha\gamma^* & \beta\mathfrak{T}^* + \varkappa\mathfrak{L}\mathfrak{T}^* + \alpha\mathfrak{T}^* & \beta\beta^* + \varkappa\mathfrak{L}\mathfrak{L}^* + \alpha\alpha^* \end{array}}{\begin{array}{c|c|c} 1 & 0 & 0 \\ \hline 0 & \varkappa & 0 \\ \hline 0 & 0 & 1 \end{array}} = \mathfrak{U}_{1:n:1} \mathbb{R}^{1:n:1}$$

$$\mathfrak{U}_{|\mathbb{K}: \mathfrak{L}: \mathbb{K}} = \frac{\begin{array}{c|c|c} \delta & \mathfrak{L} & -\beta^* \\ \hline -\varkappa\mathfrak{L}^* & \mathfrak{T} & -\varkappa\mathfrak{L}^* \\ \hline \beta & \mathfrak{L} & \alpha \end{array}}{\delta + \delta^* = 0 = \alpha + \alpha^*: \quad \mathfrak{T} + \mathfrak{T}^* = 0} = \mathfrak{U}_{1:n:1} \mathbb{R}^{1:n:1}$$