$$\ulcorner\lrcorner f^{\sharp} = \begin{cases} \ulcorner\lrcorner f^{t} & \text{bilin}\\ \ulcorner\lrcorner f^{*} & \text{balin}\end{cases}$$

$$\varepsilon \text{ bilin } \varepsilon f \lrcorner \ulcorner^{t} = \overbrace{\ulcorner\lrcorner f^{t}}^{t} = f \lrcorner^{t} \ulcorner^{t} \Leftrightarrow \varepsilon \lrcorner = \lrcorner^{t}$$

$$\varepsilon \text{ ailin } \varepsilon f \lrcorner \ulcorner^{*} = \overbrace{\ulcorner\lrcorner f^{*}}^{*} = f \lrcorner^{*} \ulcorner^{*} \Leftrightarrow \varepsilon \lrcorner = \lrcorner^{*}$$

involution

$$\tilde{\ulcorner}\, J = \begin{cases} \ulcorner J & \text{lin}\\ \bar{\ulcorner} J & \text{alin}\end{cases}$$

$$\ulcorner\lrcorner\, \overbrace{\tilde{f}}^{\sharp} = \ulcorner\lrcorner\, J^{\sharp} \tilde{f}^{\sharp} \begin{cases} \ulcorner\lrcorner J^{t} f^{t} & \text{lin-bilin}\\ \ulcorner\lrcorner J^{*} f^{*} & \text{lin-balin}\\ \ulcorner\lrcorner J^{t} f^{*} & \text{alin-bilin}\\ \ulcorner\lrcorner J^{*} f^{t} & \text{alin-balin}\end{cases}$$

consistent

$$\tilde{\ulcorner}\, J \lrcorner\, J^{\sharp} \tilde{f}^{\sharp} = \underbrace{\tilde{\ulcorner} J} \lrcorner\, \overbrace{\tilde{f} J}^{\sharp} = \mu \underset{\sim}{\ulcorner\lrcorner f^{\sharp}} = \mu \tilde{\ulcorner}\, \tilde{\lrcorner}\, \tilde{f}^{\sharp} \Leftrightarrow J \lrcorner\, J^{\sharp} = \mu\, \tilde{\lrcorner} \quad \begin{cases} \ulcorner J \lrcorner J^{\sharp} f^{\sharp} = \underbrace{\ulcorner J} \lrcorner\, \overbrace{f J}^{\sharp} = \mu \ulcorner\lrcorner f^{\sharp} & \Leftrightarrow J \lrcorner J^{\sharp} = \mu \lrcorner \\ \bar{\ulcorner} J \lrcorner J^{\sharp} \bar{f}^{\sharp} = \underbrace{\bar{\ulcorner} J} \lrcorner\, \overbrace{\bar{f} J}^{\sharp} = \mu \overline{\ulcorner\lrcorner f^{\sharp}} = \mu \bar{\ulcorner}\, \bar{\lrcorner}\, \bar{f}^{\sharp} & \Leftrightarrow J \lrcorner J^{\sharp} = \mu \bar{\lrcorner} \end{cases}$$

$$\left.\begin{array}{cc|cc} \multicolumn{2}{c|}{-1} & \begin{matrix} a & b \\ c & d\end{matrix} \\ \hline \begin{matrix} a & b \\ c & d\end{matrix} & & \multicolumn{2}{c}{-1} \end{array}\right._{J} \left.\begin{array}{c|c} -1 & \begin{matrix} a & b \\ c & d\end{matrix} \\ \hline \begin{matrix} a & b \\ c & d\end{matrix} & -1 \end{array}\right._{B} = \left.\begin{array}{c|c} \begin{matrix} a & b \\ c & d\end{matrix} & -1 \\ \hline -1 & \begin{matrix} a & b \\ c & d\end{matrix} \end{array}\right._{D}$$

$$\mathbb{R}_{p+q|p+q}$$

$$\left.\begin{array}{c|c} -1 & \begin{matrix} 1_p & 0 \\ 0 & -1_q\end{matrix} \\ \hline \begin{matrix} 1_p & 0 \\ 0 & -1_q\end{matrix} & -1 \end{array}\right._{J} \left.\begin{array}{c|c} -1 & \begin{matrix} 1_p & 0 \\ 0 & 1_q\end{matrix} \\ \hline \begin{matrix} 1_p & 0 \\ 0 & 1_q\end{matrix} & \begin{matrix} -1_p & 0 \\ 0 & -1_q\end{matrix} \end{array}\right._{B} = \left.\begin{array}{c|c} \begin{matrix} 1_p & 0 \\ 0 & -1_q\end{matrix} & -1 \\ \hline -1 & \begin{matrix} 1_p & 0 \\ 0 & -1_q\end{matrix} \end{array}\right._{D}$$

$${}^{p+q}\mathbb{R}^{\subset}_{p+q} \times {}^{p+q}\mathbb{R}^{\subset}_{p+q} \quad {}^{p+q:p+q}\mathbb{R}^{\cup}_{p+q:p+q} \quad {}^{2p:2q}\mathbb{R}^{\cup}_{2p:2q}$$

$${}^{p:q}\mathbb{R}^{\cup}_{p:q} \times {}^{p:q}\mathbb{R}^{\cup}_{p:q}$$

$${}^{p:q}\mathbb{R}^{\cup}_{p:q}$$

$$\mathbb{R}_{2n|_{n}}$$

$$\begin{array}{c|c|c|cc|c|c|c}
0 & 0 & 0 & 1_n & 0 & 0 & 1_n & 0 \\ \hline
0 & 0 & -1_n & 0 & 0 & 0 & 0 & 1_n \\ \hline
0 & 1_n & 0 & 0 & -1_n & 0 & 0 & 0 \\ \hline
-1_n & 0 & 0 & 0 & 0 & -1_n & 0 & 0
\end{array} = \begin{array}{c|c|c|c}
0 & -1_n & 0 & 0 \\ \hline
1_n & 0 & 0 & 0 \\ \hline
0 & 0 & 0 & 1_n \\ \hline
0 & 0 & -1_n & 0
\end{array}$$

$$\begin{array}{c|c}
-1 & \begin{array}{cc} 0 & 1_n \\ -1_n & 0 \end{array} \\ \hline
\begin{array}{cc} 0 & 1_n \\ -1_n & 0 \end{array} & -1
\end{array}
\begin{array}{c|c|c|c}
0 & 0 & 1_n & 0 \\ \hline
0 & 0 & 0 & 1_n \\ \hline
-1_n & 0 & 0 & 0 \\ \hline
0 & -1_n & 0 & 0
\end{array} = \begin{array}{c|c|c|c}
0 & -1_n & 0 & 0 \\ \hline
1_n & 0 & 0 & 0 \\ \hline
0 & 0 & 0 & 1_n \\ \hline
0 & 0 & -1_n & 0
\end{array}$$

$$\mathbb{R}_{n|n}$$

$$\mathbb{R}_{n|n}$$

$$\mathbb{R}_{2n|n}$$

$$\mathbb{R}_{2n|n}$$

$$\mathbb{R}_{2n|n}$$

$$\mathbb{R}_{p+q|p+q}$$