$$\overset{\times}{\mathbb{K}}$$

$$\bar{G} = H_p$$

$$\underline{G} = H_h = H_{\mathbb{C}}$$

$$\bar{G}_h = G_p$$

$$G_{\mathbb{C}} = H_{\mathbb{H}}$$

$$\begin{tikzcd}
 & \overset{+}{\mathbb{R}}_{n:n} \\
 & \bar{\mathbb{R}}_{n:n} \arrow[u] \arrow[ddl] \arrow[ddr] \arrow[dddrr] \\
\overset{+}{\mathbb{C}}_{n:n} & & {}^{n}\mathbb{R}_n^{\complement} \times {}^{n}\mathbb{R}_n^{\complement} \arrow[u] \arrow[dl] \arrow[dr] \arrow[dddrr] & & \mathbb{R}_{n:n} \arrow[ddl] \arrow[dddrr] & & \dot{\mathbb{C}}_{n:n} \\
\bar{\mathbb{C}}_{n:n} \arrow[ddr] & & {}^{n}\mathbb{C}_n^{\complement} \arrow[ddl] \arrow[ddr] & & & & \\
 & & & & {}^{n}\mathbb{R}_n^{\complement} \arrow[uu] \arrow[dl] \arrow[dr] & & {}^{n}\mathbb{C}_n^{\complement} \times {}^{n}\mathbb{C}_n^{\complement} \arrow[uu] \arrow[dl] \arrow[dr] \\
{}^{n}_{2}\mathbb{R}_n^{\complement} \arrow[u] \arrow[ddr] & & {}^{n}\mathbb{R}_n^{\complement} \arrow[uu] \arrow[ddl] \arrow[ddr] & & {}^{n}_{2}\mathbb{R}_n^{\complement} \arrow[ddl] \arrow[ddr] & & \\
{}^{n}\mathbb{H}_n^{\complement} \arrow[u] \arrow[ddr] & & & & & & \\
 & & & & \mathrm{SS} & & \\
{}^{n}\mathbb{C}_n^{\complement} \arrow[uu] \arrow[ddr] & & \mathbb{C}_{n:n} \arrow[uu] \arrow[ddl] & & {}^{n}\mathbb{R}_n^{\complement} \times {}^{n}\mathbb{R}_n^{\complement} \arrow[uu] \arrow[ddl] & & {}^{n}\mathbb{C}_n^{\complement} \arrow[uu] \arrow[ddl] \\
 & & & & & & \\
 & & {}^{n}_{2}\mathbb{C}_n^{\complement} \arrow[uu] & & & & \\
 & & & & & & \\
 & & {}^{n}\mathbb{C}_n^{\complement} \times {}^{n}\mathbb{C}_n^{\complement} \arrow[uu] & & & &
\end{tikzcd}$$

$$
\begin{tikzcd}
 & {}^{n}\mathbb{C}_{n}^{\complement} \arrow[dr] & \\
{}^{n}\mathbb{R}_{n}^{\complement} \arrow[ur] \arrow[r] \arrow[dr] & {}^{2n}\mathbb{R}_{2n}^{\complement} \ulcorner {}^{n}\mathbb{C}_{n}^{\complement} \arrow[r] & {}^{2n}\mathbb{C}_{2n}^{\complement} \ulcorner {}^{n}\mathbb{C}_{n}^{\complement} \times {}^{n}\mathbb{C}_{n}^{\complement} \\
 & {}^{2n}\mathbb{R}_{2n}^{\complement} \ulcorner {}^{n}\mathbb{R}_{n}^{\complement} \times {}^{n}\mathbb{R}_{n}^{\complement} \arrow[ur] &
\end{tikzcd}
$$