surface of the quadric line complex X; it may be thought of, in slightly different terms, as the set of foci of pencils of lines in the complex X. We denote by $R \subset S$ the locus of points $p \in S$ such that case 3 occurs. We define the dual Kummer surface $S^* \subset \mathbb{P}^{3*}$ to be the locus of hyperplanes $h \in \mathbb{P}^{3*}$ such that X_h is singular, i.e., the set of planes in $\mathbb{P}^3$ swept out by the pencils of X; let $R^* \subset S^*$ be the set of hyperplanes $h \in \mathbb{P}^{3*}$ such that case $3'$ above occurs.

⌈ $h \in \mathbb{P}^{3*}$ & X_h is a pencil $\Rightarrow$ $X_h = \sigma(p, h)$.
$\Rightarrow$ h is a plane swept out by a pencil $\sigma(p, h)$.
Clearly any plane of case $2'$ & $3'$ is swept out by a pencil of X.

For the case $1'$, $C = X_0^2 + X_1^2 + X_3^2 = 0$, $l : a_0 X_0 + a_1 X_1 + a_2 X_2 = 0$ with $a_0^2 + a_1^2 + a_2^2 = 0$. For example, $X_0 + iX_1 = 0$, $X_1 + iX_2 = 0$ & $X_0 + iX_2 = 0$ do not pass a common point. $\Rightarrow$ Any plane of case $1'$ is not swept out by the pencils of X.
⌋

Inasmuch as the set of singular plane conic curves has codimension 1 in the linear system of all conics, and the set of double lines codimension 3, we would expect the varieties S and R to be a