

# GALOIS EMBEDDINGS OF ELLIPTIC CURVES IN $\mathbb{P}^3$

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**Abstract:** For each linearly normal elliptic curve  $C \subset \mathbb{P}^3$ , we determine Galois lines and their arrangement. The results are as follows: the curve  $C$  has exactly six  $V_4$ -lines. In case  $j(C) = 1$ , it has eight  $Z_4$ -lines in addition. The  $V_4$ -lines form the edges of a tetrahedron. In case  $j(C) \neq 1$ , for each vertex of the tetrahedron, there exist exactly two  $Z_4$ -lines passing through it. As a corollary we obtain that each plane quartic curve of genus one does not have more than one Galois point.