

REAL HYPERPLANE SECTIONS AND LINEAR SERIES ON ALGEBRAIC CURVES

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Given a real algebraic curve in projective space, we study the computational problem of deciding whether there exists a hyperplane meeting the curve in real points only. This translates into a particular type of parametrized real root counting problem. More generally, given any divisor on such a curve, we may ask whether the corresponding linear series contains an effective divisor with real support. We will focus on examples and indicate a few general results.

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