

BOUNDS FOR THE EUCLIDEAN MINIMA OF FUNCTION FIELDS

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The Euclidean division is a basic tool when dealing with the ordinary integers. It does not extend to rings of integers of algebraic number fields in general. It is natural to ask how to measure the "deviation" from the Euclidean property, and this leads to the notion of Euclidean minimum. Its study is a classical topic in algebraic number theory, going back to Minkowski. In this talk (joint work with Marina Monsurrò and Leonardo Zapponi), we will define Euclidean minima for function fields and give some bounds for this invariant. We furthermore show that the results are analogous to those obtained in the number field case.