

Abelian Divisibility Sequences

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A divisibility sequence is a sequence of integers D_1, D_2, \dots with the property that if m divides n , then D_m divides D_n . Classical examples include exponential sequences $D_n = a^n - b^n$ and the Fibonacci sequence, as well as sequences constructed from elliptic curves. In this talk I will discuss various ways in which one might generalize elliptic divisibility sequences to higher dimensional abelian varieties, and I will describe properties, largely conjectural, possessed by these higher dimensional abelian divisibility sequences.