

Exposé court

125 *Investigating divisibility properties of quotient sequences derived from Lucas and elliptic divisibility sequences*

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In this study, we examine sequences generated by taking the quotient of Lucas sequences or elliptic divisibility sequences. Our investigation focuses on exploring various divisibility attributes of these derived quotient sequences. Furthermore, we establish a connection between elliptic divisibility sequences and a generalized form of Matijasevich's lemma related to Fibonacci numbers, which played a pivotal role in resolving Hilbert's tenth problem. Through this analysis, we aim to shed light on the inherent divisibility properties of these sequences and their potential implications in number theory. This is joint work with Chatchawan Panraksa.