1161-94-92   **Tovohery H Randrianarisoa*** (`trandrianarisoa@fau.edu`), Florida Atlantic University, FL.
Coding theory using Linear Complexity of Finite Sequences.

In this work, we present two metrics coming from the linear complexity of sequences over finite field. The first metric is when linear complexity is used on finite sequences viewed as vectors over a finite field. The second metric is the linear complexity where we consider periodic sequences. We show that the problems of decoding random codes embedded with these metrics are hard problems. This opens the possibility of using these metrics for code based cryptosystems. We give various properties of codes with these metrics. (Received August 11, 2020)