1077-B1-412   **Samer S Habre*** (`shabre@lau.edu.lb`), Department of Computer Science and Mathematic, P.O. Box 13-5053, Chouran, Beirut, 1102 2801, Lebanon. *Linear Iterative Systems and String Art.*

In this presentation the phase portraits for linear homogeneous iterative systems corresponding to the center axis of the Trace-Determinant plane is discussed in details. The investigation gives a sufficient condition for the solutions of such systems to form closed cycles. In other situations the cycles formed are infinite but the phase portraits exhibit some interesting behavior and are artistic in nature resembling a form of art called string art. This art is introduced and the similarity with the infinite cycles is exposed. (Received August 30, 2011)