

ICM-9401-60 Systems of Recurrence Relations - a Method to Expedite the Evaluation of Closed-Form Functions, Olaf Bachmann, Paul S. Wang and Eugene V. Zima.

ABSTRACT The problem of expediting the evaluation of closed-form functions at regular intervals is considered. SRRs are introduced as an effective tool to evaluate functions using recurrences. Algebraic properties of SRRs are examined and a general algorithm which constructs an SRR for a given function is given. A MAXIMA/CL implementation of the proposed method and its timings are discussed.