

1106-39-1068

Y Kostrov* (ykostrov@xula.edu) and **Z Kudlak**. *On Systems of Rational Difference Equations with Periodic Coefficients*. Preliminary report.

In this preliminary report, we investigate the global stability, periodic character, and the boundedness nature of the solutions of several special cases which are contained in the system of difference equations

$$x_{n+1} = \frac{\alpha_n^{(1)}}{B_n^{(1)} x_n + y_n}, \quad y_{n+1} = \frac{\alpha_n^{(2)} + \beta_n^{(2)} x_n + \gamma_n^{(2)} y_n}{A_n^{(2)} + B_n^{(2)} x_n + C_n^{(2)} y_n}, \quad n \geq 0,$$

where initial conditions x_0 are y_0 are nonnegative and not both zero, and where the coefficients are nonnegative and periodic such that the denominators are always positive. (Received September 10, 2014)