1165-39-197 **Yevgeniy Kostrov*** (kostrovy@mville.edu), 13 Campus pl Apt 2B, Scarsdale, NY 10583.

Report on Recent Developments About Rational Equations with Quadratic Term.

In this talk, we will discuss some interesting cases of a general second order quadratic rational difference equation of the form

$$x_{n+1} = \frac{Ax_n^2 + Bx_nx_{n-1} + Cx_{n-1}^2 + Dx_n + Ex_{n-1} + F}{ax_n^2 + bx_nx_{n-1} + cx_{n-1}^2 + dx_n + ex_{n-1} + f} \tag{1}$$

with nonnegative parameters and nonegative initial conditions such that $A + B + C > 0$, $a + b + c + d + e + f > 0$ and $ax_n^2 + bx_nx_{n-1} + cx_{n-1}^2 + dx_n + ex_{n-1} + f > 0$, $n = 0, 1, \ldots$. (Received January 18, 2021)