

# Almost Oscillation Criteria for Second–Order Neutral Difference Equation with Quasidifferences

**Robert Jankowski**

University of Białystok, Poland  
rjjankowski@math.uwb.edu.pl

*The talk is based on the joint work with Ewa Schmeidel.*

*Session: 7. Difference equations and their application in the mathematical modeling*

Some almost oscillation criteria for the second–order nonlinear neutral difference equation with quasidifferences

$$\Delta (r_n (\Delta (x_n + cx_{n-k}))^\gamma) + q_n x_{n+1}^\alpha = e_n.$$

are established. The results are illustrated by examples.

## References

- [1] R. Jankowski, E. Schmeidel, *Almost oscillation criteria for second order neutral difference equation with quasidifferences*, Int. J. Difference Equ. 9, 2014, 77–86..
- [2] R. Jankowski, E. Schmeidel, *Almost Oscillatory Solutions of Second Order Difference Equations of Neutral Type*, Recent Advances in Delay Differential and Difference Equations, Springer Proceedings in Mathematics & Statistics, 2014, (to appear).