1176-37-296 Mariusz Mirek* (mariusz.mirek@rutgers.edu), 110 Frelinghuysen Road, Piscataway, NJ 08854. Quantitative bounds in pointwise convergence problems.

In this survey talk we review useful tools that naturally arise in the study of pointwise convergence problems in analysis, ergodic theory and probability. We will pay special attention to quantitative aspects of pointwise convergence phenomena from the point of view of oscillation estimates in both the single and several parameter settings. We establish a number of new oscillation inequalities and give new proofs for known results with elementary arguments. (Received January 25, 2022)