Ovidiu Costin\* (costin@math.ohio-state.edu), Mathematics Department, The Ohio State University, 231 W. 18th Avenue, Columbus, OH 43210. Difference equations: Asymptotics, Borel summability and applications.

We will discuss analytical methods in difference equations stemming from recent developments in rigorous asymptotic analysis, and applications to integrability, global analytic continuation, dynamical systems, and analysis of fractals. (Received September 21, 2007)