

Limit distributions of the q -deformed binomial distribution*Martin Zeiner* (TU Graz)

FRI/P2
10:30–10:50

We investigate in a certain q -analogue of the binomial distribution which is connected with basic hypergeometric series (or q -series), namely the q -deformed binomial distribution. This distribution was introduced in the physics literature in 1994. We establish several convergence results involving the classical binomial, the Euler, the Poisson, and the exponential distribution. Some of them are q -analogues of classical convergence properties (e.g. there are is a q -analogue of the convergence of the classical binomial distribution with constant mean to the Poisson distribution).