

# DISCRETE PAINLEVÉ EQUATIONS

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### **Abstract**

A brief summary of the properties of the usual (continuous) Painlevé equations will be followed by a historical introduction to Discrete Painlevé Equations (dPE). Integrability criteria will be applied to the dPE. These equations will be derived, a classification given and their properties will be described, Special solutions will be presented. The dPE in these lectures will include both ordinary difference equations and  $q$ -difference ones.