A proper coloring of a graph is called equitable if every color class has (approximately) the same number of vertices. In
the finite setting, the celebrated Hajnal–Szemerédi theorem establishes the existence of equitable (d+1)-colorings, where
d is a bound on the vertex degrees. We discuss the existence of such colorings in the measure-theoretic and purely Borel
contexts. This is joint work with Anton Bernshteyn. (Received July 16, 2019)