PABLO SHMERKIN, Torcuato Di Tella University and CONICET

Normal numbers and fractal measures

I will present a geometric-dynamical criterion for a Radon measure on $\mathbb{R}$ to be supported on numbers normal to a given base. The criterion is given in terms of the spectrum of a dynamical system that acts on measures via magnification and renormalization. I will discuss a number of applications that recover, unify and substantially generalize a number of earlier results in the field. Joint work with Mike Hochman.