THOMAS RANSFORD, Université Laval
Decay of singular inner functions

A singular inner function is a holomorphic function on the unit disk of the form

$$S(z) := \exp\left(-\int \frac{e^{it} + z}{e^{it} - z}\, d\mu(t)\right),$$

where μ is a finite positive Borel measure on the unit circle that is singular with respect to Lebesgue measure. A well-known and important property of such functions is that $\lim_{r \to 1^-} S(re^{i\theta}) = 0$ μ-almost everywhere on the unit circle. In this talk I shall discuss the rate of convergence to zero.