On the generalized integral mean spectrum of whole-plane SLE

Résumé : In this talk, we introduce the generalized integral mean spectrum of whole-plane SLE defined as $(p,q) \mapsto \beta_f(p,q)$ where

$$\int_0^{2\pi} \frac{|f'(re^{it})|^p}{|f(re^{it})|^q} dt \sim_{r\to 1} (1-r)^{-\beta_f(p,q)},$$

f is the interior whole-plane map at time 0. This generalized spectrum unifies the approaches to the integral mean spectrum of the interior and exterior whole-plane SLE. The case $q = 2p$ corresponds to the multifractal spectrum of harmonic measure of the exterior whole-plane SLE. The spectrum $\beta_f(p,q)$ has four phases. A diagram on the plane (p,q) will be given to describe the respective domains of validity of these spectra. We will also discuss about some integrable cases.