DIMENSION AND MEASURE FOR LIMIT SETS OF KLEINIAN GROUPS

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Kleinian groups act discretely on hyperbolic space and give rise to beautiful and intricate mathematical objects, such as tilings and fractal limit sets. The dimension theory of these limit sets, and associated Patterson-Sullivan measures, has a particularly interesting history, with the first calculation of the Hausdorff dimension going back to seminal work of Patterson from the 1970s. In the geometrically finite case, the Hausdorff, box-counting, and packing dimensions are all given by the Poincare exponent. I will discuss recent work on the Assouad dimension, which is not necessarily given by the Poincare exponent in the presence of parabolic points.