

Abstract:

Following Gromov, hyperbolic groups have a natural compactification by a "boundary at infinity", and the group acts on this boundary by homeomorphisms. This talk will explain a program to show that these boundary actions have a remarkable rigidity property: any small perturbation of the action is semi-conjugate to the original. While the study of boundary actions and rigidity has roots going back to Selberg and Mostow, this recent project to study hyperbolic groups grew out of joint work with J. Bowden, and now with J. Manning and T. Weisman. I will give some motivation for the problem and introduce some key ideas from our work.