

1016-37-324

**Roman Muchnik\*** ([roma@math.uchicago.edu](mailto:roma@math.uchicago.edu)). *Analysis on the boundary of a negatively curved spaces.*

I will explain some ideas behind the proof of irreducibility of boundary representations discussed by U. Bader. I will describe some analytical ideas involved in the course of the proof, and in particular our construction of averaging operators.

Some of these idea were used before in a joint work with C. Conell. to prove the harmonicity of the Paterson-Sullivan measure. If time permits, I will describe how to obtain this result, as well as farther application of this approach, such as equidistrabutions result. (Received February 14, 2006)