Zoltan Balogh: Gromov hyperbolicity and pseudoconvexity.

The purpose of this talk to give present the result of our joint work with Mario Bonk according to which strongly pseudoconvex domains are Gromov hyperbolic with respect to the Kobayashi or the Bergman metric.

Anders Karlsson: The boundary at infinity

I will begin with some brief introductory remarks addressing questions of when, where, and why one would like to introduce boundaries of spaces. After that we will go over the basic definitions for CAT(0) spaces and Gromov hyperbolic spaces. Then I intend to describe a standard alternative description in terms of horofunctions which moreover makes sense for any metric space. As an illustration, we will see some applications of this, perhaps to how amenable groups may act on non-positively curved spaces following the development due to Avez, Gromov, Zimmer, Anderson, Burger, Schroeder, Adams and Ballmann

Marc Troyanov: Sobolev Spaces on Metric Measure Spaces.

Some 20 years ago, several notions of (first order) Sobolev spaces on metric measure spaces have emerged. Potential theories on metric spaces have been successfully developed based on these constructions and they are now a basic tool in analysis on metric spaces.

In this talk, I shall review some of these Sobolev spaces, and discuss an axiomatic viewpoint on the subject.