Let ρ be the hyperbolic distance on the unit disc. During the talk we explained the following recent result of Christdoulou and Short:

Let f be a holomorphic self map of the unit disc and a, b, z be three different points there. Then

$$\rho(f(z), z) \leq K(\rho(f(a), a) + \rho(f(b), b))$$

with

$$K = \frac{\rho(z, a) + \rho(a, b) + \rho(z, b)}{\rho(a, b)}$$

which does not depend on f.

This result is a quantitive version of the well known result that a holomorphic self map of the unit disc which fixes two points is the identity.

Later on we sketched an application of the above result to a boundary version of Cartan type theorem which was recently obtained by A. Zimmer.