1035-53-726 Francesco Bonsante* (bonsante@sns.it), via Ferrata, 1, 27100 Pavia, Italy. Earthquakes on hyperbolic surfaces with geodesic boundary and multi black holes.

I will present the results of a joint work with Kirill Krasnov and Jean Marc Schlenker. By following Mess, we prove that the existence of earthquakes relating two hyperbolic surfaces with geodesic boundary is equivalent to the existence of convex bent hyperbolic surfaces in some Anti de Sitter multi black hole space. As a consequence, we determine the number of the earthquakes relating two given hyperbolic surfaces with geodesic boundary. (Received September 14, 2007)