1108-51-321 **David Constantine\*** (dconstantine@wesleyan.edu), Department of Math and Computer Science, Welseyan University, 265 Church St, Middletown, CT 06459. Marked length spectrum and volume rigidity for Fuchsian buildings.

Let  $X_1$  and  $X_2$  be compact quotients of thick Fuchsian buildings with CAT(-1) metrics. We prove that if the marked length spectra of these spaces are the same, then they have the same volume. This is joint work with Jean-François Lafont, and is one part of the proof of marked length spectrum rigidity for Fuchsian buildings presented in his talk in this session. (Received January 17, 2015)