1100-30-261 David Radnell (dradnell@aus.edu), Department of Mathematics and Statistics, American University of Sharjah, P.O. Box 26666, Sharjah, United Arab Emirates, Eric Schippers\* (eric\_schippers@umanitoba.ca), Department of Mathematics, Machray Hall, 186 Dysart Rd, University of Manitoba, Winnipeg, Manitoba R3T 3A8, Canada, and Wolfgang Staubach (wolfgang.staubach@math.uu.se), Department of Mathematics, Uppsala Universitet, Box 256, 751 05, Uppsala, Sweden. The Weil-Petersson metric on a Teichmuller space of bordered surfaces.

The Weil-Petersson metric is a Kahler metric on the Teichmuller space of compact surfaces with finitely many punctures. The natural generalization of this metric does not in general converge on infinite-dimensional Teichmuller spaces. It was shown to converge on a refinement of the universal Teichmuller space by Cui, Hui, and Takhtajan/Teo.

In this talk I will discuss generalizations of these results to the case of surfaces of genus g bordered by n closed curves. In particular, there is a refined Teichmuller space of such surfaces with complex Hilbert manifold structure, and a convergent Weil-Petersson metric. Joint work with David Radnell and Wolfgang Staubach. (Received February 09, 2014)