998-58-285 **Sumio Yamada*** (`yamada@math.uab.edu`), Department of Mathematics, University of Alabama at Birmingham, 1300 University Boulevard, Birmingham, AL 35294-1170. *Analysis of Weil-Petersson Tangent Cones on Teichmuller Spaces.* Preliminary report.

We will discuss the structure of tangent cones on Weil-Petersson completed Teichmuller spaces. The Teichmuller spaces are known to be not locally-compact. However, we will show that each tangent cone is locally compact. This fact has global implications, in particular, with regard to existence of harmonic mappings into the Teichmuller spaces.

(Received March 01, 2004)