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**Qionglin Li\*** (ql4@rice.edu). *Teichmuller Space Is Totally Geodesic In Goldman Space*. Preliminary report.

In this talk, we construct a new Riemannian metric on Goldman space, the deformation space of convex real projective structures on a compact genus  $g(g>1)$  surface, and then prove the new metric and the metric of Darvishzadeh and Goldman both restrict to be Weil-Petersson metric on Teichmuller space. Moreover, Teichmuller space endowed with Weil-Petersson metric is totally geodesic in Goldman space, as a Riemannian manifold. Finally, we consider a circle action on Goldman space and prove it preserves the metric. (Received September 10, 2012)