1086-51-467 **Babak Modami*** (babak.modami@yale.edu), Mathematics Department, Yale University, 442 Dunham Lab., 10 Hillhouse Ave., New Haven, CT 06511. *Prescribing the behavior of Weil-Petersson geodesics.*

Weil-Petersson (WP) metric is an incomplete Riemannian metric on the moduli space of Riemann surfaces with negative sectional curvatures. The sectional curvatures are not bounded away from 0 and $-\infty$. Due to these features most of the standard techniques would not apply to study the global geometry and dynamics of WP metric.

In this talk we will present some partial results about prescribing the behavior of WP geodesics and parametrization of their asymptotic classes. For this purpose we would use a notion of ending lamination for WP geodesic rays and the assigned subsurface coefficients to any pair of them. Examples of WP geodesics staying away from a compact set and diverging rays would be discussed.

These results would be considered as an analogue of the coding of geodesics on the modular surface in terms of continued fraction expansions. (Received September 03, 2012)