

DIFFERENTIAL GEOMETRY/PDE SEMINAR

WEDNESDAY, MAY 24, 2017

PADEL FORD C-36

4PM–5PM

Boundary behaviour of the Weil-Petersson metric

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The Weil-Petersson metrics on the Riemann moduli spaces of complex structures for an n -fold punctured oriented surface of genus g , in the stable range $g + 2n > 2$, are shown to have complete asymptotic expansions in terms of Fenchel-Nielsen coordinates at the exceptional divisors of the Knudsen-Deligne-Mumford compactification. The results are then applied to obtain the asymptotic expansions of the Ricci curvature and the sectional curvature of the moduli spaces. This is joint work with Richard Melrose.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, www.math.washington.edu, follow the link **Seminars, Colloquia, and Conferences**).

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