1042-14-194   **Maksym Fedorchuk*** (`mfedorch@math.columbia.edu`), RM 613, MC 4406, 2990 Broadway, New York, NY 10027. *Moduli and enumerative geometry of curves on rational ruled surfaces.*

We study parameter spaces of curves of fixed genus on rational surfaces. Our results are enumerative in nature but the main ingredients in the proof are compact moduli of stable log surfaces and stable curves. We will also discuss implications of our results to the birational geometry of $\overline{M}_g$. (Received August 18, 2008)