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Gong Chen, Toronto, ON M5S 2E4, Canada, and **Jiaqi Liu*** (jliu@math.toronto.edu),
Toronto, ON M5S 2E4, Canada. *Soliton resolution of the modified KdV equation—nonlinear
steepest descent.*

The soliton resolution for the focusing modified Korteweg-de vries (mKdV) equation is established for initial conditions in some weighted Sobolev spaces. Our approach is based on the nonlinear steepest descent method and its reformulation through $\bar{\partial}$ -derivatives. From the view of stationary points, we give precise asymptotic formulas along trajectory $x=vt$ for any fixed v . (Received September 09, 2019)