1126-82-66Thomas Joachim Bothner* (bothner@umich.edu), 530 Church Street, Ann Arbor, MI 48109.
On the analysis of incomplete spectra in random matrix theory through an extension of the
Jimbo-Miwa-Ueno differential. Preliminary report.

Recently A. Its, O. Lisovyy and A. Prokhorov [1] have found a way to extend the classical Jimbo-Miwa-Ueno isomonodromic tau function [2] to the full space of extended monodromy data of systems of linear ordinary differential equations with rational coefficients. We shall use this method to analyze incomplete spectra in unitary random matrix models.

References

- A. Its, O. Lisovyy, A. Prokhorov, Monodromy dependence and connection formulae for isomonodromic tau functions. preprint arXiv:1604.03082
- [2] M.Jimbo, T.Miwa, K.Ueno, Monodromy preserving deformation of linear ordinary differential equations with rational coefficients. I, *Physica* D2, (1981), 306?352.

(Received December 31, 2016)