1136-14-61 **Emma Previato*** (ep@bu.edu), Department of Mathematics and Statistics, Boston University, Boston, MA 02215-2411. *Painlevé equations and integrable hierarchies: Two spectral curves.*

Heuristically, self-similar solutions to "integrable" hierarchies of PDEs satisfy a Painlevé equation. We investigate the equivariance of the correspondence under Darboux transformation, and give an interpretation of the transformation in terms of the moduli of two types of spectral curves. We apply the results to special solutions found in the 1970s by M. Boiti and F. Pempinelli, comparing them to the general algebraic solutions classified in the 1990s by K. Okamoto and by B. Dubrovin jointly with M. Mazzocco. (Received December 22, 2017)