1107-13-488 **Joe Buhler*** (buhler@ccrwest.org). Robbins p-adic stability for Somos sequences. Preliminary report.

David Robbins conjectured that Dodgson condensation has a surprising "*p*-adic stability" when computed with finite precision *p*-adic floating point arithmetic. This appears to extend to much more general contexts, including (suitable) cluster algebras and, in particular, to certain Somos sequences. Moreover, there is a natural purely algebraic conjecture that implies the Robbins-like conjectures. We consider this circle of ideas for Somos sequences, proving the algebraic conjecture for Somos-4 and Somos-5, and giving interesting empirical observations for related sequences. (This is joint work with Kiran Kedlaya.) (Received January 20, 2015)