

1164-57-71

Kathryn Mann* (k.mann@cornell.edu), **Jonathan Bowden**, **Sebastian Hensel**, **Emmanuel Militon** and **Richard Webb**. *Homeomorphisms of surfaces and the big curve graph*.

In recent work, Bowden, Hensel and Webb studied a variant of the classical curve graph, whose vertices are all simple closed curves (not curves up to isotopy!) In my talk I'll explain why this is an extremely useful, (though enormous!) object and describe new joint work with the aforementioned BHW and Emmanuel Militon, that relates the dynamics of isotopically trivial homeomorphisms of the surface to the dynamics of their induced actions on this big curve graph, giving us new tools to study dynamics of group actions. (Received January 13, 2021)