1176-19-132   **Matthew Hogancamp*** (`m.hogancamp@northeastern.edu`) and **Nicolle S Gonzalez**.
Carlsson–Mellit algebras and skein theory. Preliminary report.

I will discuss a topological description of (the qt=1 specialization of) the Carlsson-Mellit algebra Aqt and its polynomial representation. This topological description uses the HOMFLY-PT skein relation or, equivalently, Hecke algebras in type A. By categorifying these ideas we obtain a weak categorical action of the full Aqt on categories related to Soergel bimodules (this complements work of Carlsson–Gorsky–Mellit which gives a Hilbert scheme interpretation of Aqt). This is joint work with Nicolle Gonzalez. (Received January 18, 2022)