1163-F1-1142 **Nancy Scherich** and **Sherilyn Tamagawa*** (`shtamagawa@davidson.edu`). *Niebrzydowski Algebras and Trivalent Spatial Graphs.* Preliminary report.

In this talk, we will introduce virtual Niebrzydowski algebras, algebraic structures with two ternary operations and a partially defined multiplication, whose axioms are motivated by the Reidemeister moves for Y-oriented virtual trivalent spatial graphs and handlebody-links. We will also show examples of the counting invariant on some trivalent spatial graphs and classify the small virtual Niebrzydowski algebras. (Received September 14, 2020)