Rachael M. Norton* (rachael.norton@northwestern.edu). A Nevanlinna-Pick theorem in the context of the weighted Hardy algebra over a $W^*$-correspondence.

Since the original proof of the Nevanlinna-Pick theorem in 1915, many noncommutative generalizations have arisen and two proof strategies have emerged: via a commutant lifting theorem or via a displacement equation. In this talk, we present a generalized Nevanlinna-Pick theorem in the setting of the weighted Hardy algebra over a $W^*$-correspondence, which generalizes a theorem proved by the author in 2017. The proof hinges on a displacement equation and avoids commutant lifting. Time permitting, we compare our result with a similar theorem proved by Good in 2017 via her weighted commutant lifting theorem. (Received September 24, 2018)