

1154-47-1385 **Edward J Timko*** (edward.timko@umanitoba.ca), 15 Carlton Street, Apartment 705,
Winnipeg, Manitoba R3C1N8, Canada. *Spectral Properties of Model d -Tuples.*

In this talk, we examine the spectral properties of compressions Z of the coordinate multiplication d -tuple to co-invariant subspaces of special reproducing kernel Hilbert spaces. The co-invariant subspaces arise as orthogonal complements of multiplier ideals, and the reproducing kernel Hilbert spaces are all complete NP and possess unitarily-invariant kernels over the unit ball. We show that several different notions of joint spectrum coincide for Z and we connect the spectra with function-theoretic properties of the given ideal. We then use these results to study constrained d -tuples of operators possessing an absolutely continuous functional calculus associated with the model. This is joint work with Raphael Clouatre. (Received September 15, 2019)