We consider the dilation theory for a certain type of semigroup dynamical systems that encode the right LCM structure of the semigroup. This leads to a generalized Naimark dilation theorem and Stinespring's dilation theorem for these semigroup dynamical systems. As an application, we prove a dilation result for contractive representations of the boundary quotient. This is a joint work with Marcelo Laca.

BOYU LI, University of Victoria Dilation theory for right LCM semigroup dynamical systems