Abdelaziz Rhandi (Salerne)

Title: Abstract boundary delay systems and application to network flow.

Abstract: In this talk we investigate the well-posedness and positivity of solutions to a class of delayed transport equations on a network. The material flow is delayed at the vertices and along the edges. The problem is reformulated as an abstract boundary delay equation, and well-posedness is proved by using the Staffans-Weiss theory. We also establish spectral theory for the associated delay operators and provide conditions for the positivity of the semigroup.