PIETRO-LUCIANO BUONO, University of Ontario Institute of Technology Symmetric delay-coupled rings of Lang-Kobayashi laser models

I will present recent results on Compound Laser Mode (CLM) solutions and their bifurcations in delay-coupled rings of Lang-Kobayashi equations with cyclic and dihedral symmetry groups. Group-theoretic methods are used to classify CLMs and their bifurcations. Numerical computations with Maple and DDE-Biftool are used to identify steady-state and Hopf bifurcation points on the CLMs. The numerical continuations are performed using DDE-Biftool. This is joint work with my PhD student J. Collera from Queen's University.