SHAWN WANG, University of British Columbia Okanagan, Kelowna, BC Canada *Resolvent Averages of Monotone Operators*

Monotone operators play important roles in optimization and convex analysis. We define a new average of monotone operators by using resolvents. The new average enjoys self-duality. When the monotone operators are positive definite matrices, the new average lies between harmonic average and arithmetic average. Proximal average will also be discussed.

This is a joint work with Heinz Bauschke and Sarah Moffit.