SHAWN WANG, Department of Mathematics, University of British Columbia Okanagan
Bregman circumcenters: basic theory

Circumcenters play an important role in the design and analysis of accelerating various iterative methods in optimization. In this work, we propose Bregman (pseudo-)circumcenters associated with finite sets. We show the existence of and give explicit formulae for the unique backward and forward Bregman pseudo-circumcenters of finite sets. Moreover, we use duality to establish connections between backward and forward Bregman (pseudo-)circumcenters. Joint work with Hui Ouyang.