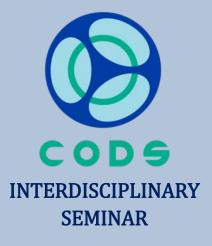


Saeed Rahmati Department of Mathematics & Statistics, TRU

Anisotropic Regularization of Generalized Complementarity Problems

Abstract. This talk is an extension of Facchinei and Kanzow's ideas to generalized complementarity problems. It is shown that after perturbing the relatively uniform Pfunctions f and g using an anisotropic regularization, under certain conditions, the resulting generalized complementarity problem, GCP(f, g), has a coercive merit function and a unique solution. Using degree theory, it is shown that the degree of the corresponding NCP-function is nonzero. It is also shown that for two continuously differentiable relatively P_0 -functions f and g, where g is a homeomorphism and SOL(f, g), the solution set of GCP(f, g), is nonempty, GCP(f,g) is stable if and only if SOL(f,g) is bounded.

Currently, Saeed Rahmati is a sessional lecturer at Thompson Rivers University. He studied General Topology in his Master's program at the Jundishapour University of Ahvaz in Iran and Algebraic Topology in his PhD program at the University of Alberta in Canada. After graduation in Fall 2013, he joined Thompson Rivers University as a sessional lecturer and in the Summer 2014, he was a postdoc at TRU, working with Dr. Tawhid on generalized complementarity problems.



Wednesday, Feb 25, 2015 OM 3772 2:30 – 3:30

EVERYONE WELCOME! Cake will be served ©