

Equilibria on simplices in Hilbert spaces

Karolina Fisiak

I will present and discuss the equilibrium existence results for continuous maps defined on compact and convex subsets of Hilbert spaces and bring-up theorems in which the existence of zeros stems from assumptions regarding boundary behaviour of mappings. The main subject will revolve around Browder's Theorem, Vrahatis' Theorem and its infinite-dimensional version. During the presentation I will examine tangent and normal cones and their connection to the orthogonal projection. Additionally, I will show that sometimes the sign conditions can be interpreted from the perspective of the geometric property which is the belonging to the tangent and normal cones.

First Author: Karolina, Fisiak

Affiliation: *Institute of Mathematics, Lodz University of Technology,
93-590, Poland*

e-mail: karolina.fisiak.tul@gmail.com