BERTA GAMBOA DE BUEN, Centro de Investigación en Matemáticas
Empty intesection of slices and the fixed point property in Banach spaces

We prove that the condition of the empty slice property (EIS), which is a generalization of uniform smoothness, implies the fixed point property. That is, in a Banach space with EIS, every nonexpansive map from a weakly compact convex set into itself has a fixed point. Furthermore, the EIS property is stable under finite l^p sums of Banach spaces. We also give some examples.

(Joint work with Helga Fetter)