

1096-46-1715

J. Alejandro Chavez-Dominguez*, 2515 Speedway Stop C1200, Austin, TX 78712-1202.

Lipschitz p -convex and q -concave maps.

The notions of p -convexity and q -concavity are mostly known because of their importance as a tool in the study of isomorphic properties of Banach lattices, but they also play a role in several results involving linear maps between Banach spaces and Banach lattices. In this talk we introduce Lipschitz versions of these concepts, dealing with maps between metric spaces and Banach lattices, and prove nonlinear versions of two well-known factorization theorems (due to Maurey/Nikishin and Lindenstrauss/Tzafriri). We also show an explicit relationship between the linear and nonlinear versions of p -convexity. (Received September 16, 2013)