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Irina Peterburgsky* (peterbur@mcs.suffolk.edu), MA. *Various types of convexity of Banach spaces and solutions to dual extremal problems.*

An interrelationship is established between different kinds of convexity of unit balls of complex Banach spaces, on one hand, and types of "uniqueness" of solutions to a wide set of extremal problems (and their dual problems) over classes of bounded analytic functions with codomains in corresponding Banach spaces, on the other hand. In addition, location of extremal functions in the unit balls of functional spaces has been studied in the connection to the above matters. (Received September 19, 2007)