Influence of the second coefficient of univalent functions to Hardy space estimates

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Abstract: We consider univalent functions in the typical geometric subclasses (convex, starlike, close-to-convex, convex in one direction and typically real) having prescribed second coefficient and find the optimal Hardy space where these functions and their derivatives belong. For convex functions, we give smoothness conditions for their boundary and a new uniform bound for their coefficients.

This is joint work with Martin Chuaqui (Pontificia Universidad Católica de Chile) and Rodrigo Hernández (Universidad Adolfo Ibáñez).