

INDEX OF CONVEXITY AND THE SHARPNESS OF THE MARKOV TYPE INEQUALITIES

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In this talk we introduce the notion of *index of convexity* for a convex function. We show the basic properties of this index that are important from our point of view. Moreover, we illustrate the connection of the index of convexity with the sharpness of the Markov type inequalities and the Markov exponent. These problems are related to the results obtained in the recent article “Sharp L_p Markov type inequality for cuspidal domains in \mathbb{R}^d ” by Kroó.