## Revisiting Norms and duality in $\mathbb{R}^n$

by

Geraldo Soares de Souza - Professor Emeritus

Auburn University Department of Mathematics and Statistics Auburn-Alabama-USA

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Email: desougs@auburn.edu

Abstract

In this talk, we review some aspects of the norms and equivalence of norms in  $R^n$ , the famous Cauchy-Schwarz inequality, the Riesz representation theorem, and some other properties. We focus on the pathological case of lp norms for  $0 and compare with those norms for p larger or equal to 1, and introduce a new class of functions and the notion of almost e-type norm. This talk will be beneficial to all, and especially for those teaching Linear Algebra, Analysis and for even more advanced Functional Analysis in <math>R^n$ . I hope you will take time of your busy schedule to

attend it.

About the speaker

Geraldo Soares de Souza, PhD from The University of Albany, Albany - New York in the area of Harmonic Analysis. He is currently a Professor Emeritus of Mathematics at Auburn University in Auburn, Alabama. He has had several Master and PhD students and publications in his area of expertise. For over 25 years, he has led a series of conferences in Harmonic Analysis and Related Areas at Auburn University sponsored by NSF. He and his colleagues have led several international projects in Africa, South America, Central America, etc. Recently Dr. de Souza and some of colleagues and former PhD students created a project at Gaston Berger University in St Louis in Senegal and in AUST (African university of science and technology) in Abuja in Nigeria, as well as in the Management and Technology University in Lahore in Pakistan.



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