

# Inequalities/Geometry/Optimization

by

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and

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**Department of Mathematics UFPI**

**In Memory**

**Professor Dr João Benício de Melo Neto**

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## Abstract

I view this presentation as simple or perhaps an elementary approach to the subject. On the other hand, this talk will show some interesting observations that are part of the folklore of mathematics. I will go over some very common and important inequalities that we see in the course of Analysis and even in Calculus. I will give some different views of different proofs, using Geometry, Graphing and some of them “a new analytic proof” by using optimization of functions of two variables. This talk will be beneficial to all, and especially for those teaching Calculus of one and two variables. 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, he and some colleagues have been awarded nearly 500 thousand dollars from NSF and other agencies to create a more robust infrastructure to support mathematics education in Africa.



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