

GEORGE ANASTASSIOU POST PDA REPORT END OF FALL 2016

I have just finished my PDA assignment for the Fall semester 2016.

The whole experience as well the outcomes of my research have been great beyond any initial expectation.

Related travelling was less than the planned one due to limited financial support (nonexistent from UM) and very important family obligations.

Trips:

- 1) To Madison Wisconsin, EPIC company, research collaboration with my former Ph.D student Razvan Mezei, September 28-October 2, 2016.
- 2) To Bangkok, Thailand, invited by Department of Mathematical Sciences, King Mongkut's University of Technology North Bangkok, November 26- December 8, 2016.

I gave there two colloquia, two hours each, on Operator Korovkin Approximation theory and Operator Fractional Inequalities. I also started there research collaboration with

Professors Jessada Tariboon and THANIN SITTHIWIRATTHAM

I tried to recruit graduate students from Thailand to come here at UM.

- 3) On the return I had a brief one day stop in Seoul, S. Korea. I had research discussions with Professor Choonkil Park of Hanyang University.

Research here at UM during Fall 2016:

- 1) I finished a very long article 57 pages about "Most General Fractional Self Adjoint Operator Representation formulae and Operator Poincaré and Sobolev type and other basic Inequalities".
- 2 I finished a short monograph about "Intelligent Comparisons II: Operator Inequalities And Approximations". That was submitted and accepted for publication at SPRINGER, Heidelberg, NY.
- 3 I completed four articles setting the foundations of a strong fractional calculus theory for Banach space valued functions, for the first time in the literature. A ground breaking theory, my main achievement this fall.

Sincerely yours
George Anastassiou



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