

To University Research Award Selection Committee

Dear Sir:

Prof.Malvina Baica asked me to write a letter of recommendation about her research work and I am very pleased to do it.

The first thing which comes into my mind is that she finished her Ph.D under the direction of HELMUT HASSE who was a World star Mathematician..

She has worked twenty years as a very appreciated Algebraic Number Theorist, and she published about 32 papers and two important books of her own research in this area,during this time.The other 14 are in Applied Mathematics.

She developed (invented)The Generalized Euclidean Algorithm known as Baica's Generalized Euclidean Algorithm (BGEA) and with it she solved about a dozen long time open and difficult problems in this field.Her results were published in reputable world wide Journals and are of very significant value.Among them is The Euclidean Fermat's Last Theorem (EFLT) which is an open contraventional problem for more than 350 years.I am not going to speak about it now,but one thing is certain that only to try solving this problem implies a lot of courage,and she did that.The opinions are splitted and so far no one proved her wrong.At the present,I do not pass a categorical judgement on her (EFLT) proof,but let not throw stones on her until SOMEONE really prove her to be WRONG.

I,only,speak with appropriate specialist knowledge about her work concerning theGoldbach Binary Problem.This is an open mathematical problem since 1742 and it is a million USD prize contest instituted by Faber-Bloomsbury publishing Company. As pointed out by Hardy and Littlewood in their 1923 paper, the circle method is insufficient to deal with the problem,even on the assumption of ERH (Extended Riemann Hypothesis) concerning the L-Series.After 80 years ,in spite of many Mathematicians efforts and struggle,the situation does not change.

In her work on the binary Goldbach's Problem,Prof.Baica has profited of two major and significant results which I performed earlier regarding the Laplace Transform Method and the proof of ERH for L-series connected with the problem.Thanks to these contributions she has been able to give significant results in the solution of Godbach Problem. This is a milestone in Number Theory and as such it would deserve the million USD prize.

I will appreciate if my letter will help you to select the winner for the University Research Award.Dr.Baica deserves much more than that.

Thank you.Sincerely,AP.


Aldo Peretti