

October 26 2018

Enoch Opeyemi Oluwole WRONG Mathematics

From Monday 22 of October 2018 till today (October 26), I got several (at least 10) e-mails, from ACADEMIA.EDU, related to a paper of **Enoch Opeyemi Oluwole** entitled

The Fourier Laplace Approach of Proving The Riemann Hypothesis

To cite this version: Opeyemi Enoch, Enoch Oluwole. The Fourier Laplace Approach of Proving The Riemann Hypothesis. [Research Report] FUYOYE. 2018, pp.9. <hal-01896277>

AS DONE several other times, **Enoch Opeyemi Oluwole** this new paper use FANCY Mathematics: he does not follow the usual rules that students learn and know!!!

I wrote other document about his way of doing...

BUT he goes on about his NONSENSE...

Here the readers of
“proposed (dis)proofs of Riemann Hypothesis”
can find one of the last!!!

Fausto Galetto
October 26 2018

Fantasy and Mathematics by Enoch Opeyemi Oluwole

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Key words: Zeta Function; zeros; Riemann Hypothesis, Good Mathematics, Fantasy

On October 24 2018 I got other new various messages (by e-mail) from Academia.edu; they were informing me that there was a new paper of

Enoch Opeyemi Oluwole

entitled

The Fourier Laplace Approach of Proving The Riemann Hypothesis

Opeyemi Enoch, Enoch Oluwole

To cite this version: Opeyemi Enoch, Enoch Oluwole. The Fourier Laplace Approach of Proving The Riemann Hypothesis. [Research Report] FUYOYE. 2018, pp.9. <hal-01896277>

The Abstract is

The Author presents a Fourier Laplace transformation of The Analytic Continuation Formula of The Riemann Zeta Function and showed that the zeros of the Analytic Continuation Formula will always be real. A general formula for these zeros is also obtained which when substituted into the ACF it is shown to be the root of the ACF of the Riemann Zeta Function.

with Keywords: *Riemann zeta function; Fourier transform; Laplace transform; Analytic Continuation Formula (ACF).*

2010 Mathematics Subject Classification: 11H05, 11M06, 11M26.

I downloaded the paper and I read it.

I will show here that it is based on a kind of Fantasy Mathematics, invented by Enoch (he did the same many other times!!! You can read several of my documents in Academia.edu).

My analysis is **NOT** about the Riemann Hypothesis proof of Enoch....

My analysis is about the Fancy Mathematics used in the THIRD page of the paper!!!

Reader, please read CAREFULLY the Excerpt given here from the paper

The Fourier Laplace Approach of Proving The Riemann Hypothesis

(2.0)

A closer look at the $\varepsilon(t)$

Riemann defined the analytical continuation formula as [1];

$$\varepsilon(t) = \frac{1}{2} - \left(t^2 + \frac{1}{4}\right) \int_1^{\infty} x^{-3/4} \psi(x) \cos\left(\frac{t}{2} \log x\right) dx \quad (1)$$

Such that

$$\psi(x) = \sum_{n \geq 1}^{\infty} e^{-n^2 \pi x} \quad (2)$$

The Fourier Cosine transform of (2) gives

$$\sum_{n \geq 1}^{\infty} \sqrt{\frac{2}{\pi}} \left[\frac{n^2 \pi}{n^2 \pi + S^2} \right] \quad (3)$$

Examining the trigonometric term in (1), it is obvious that one can write $\cos\left(\frac{t}{2} \log x\right)$ in its Laplace transform as;

$$\mathcal{L} \left[\cos \left[\left(\frac{1}{2} \log x \right) t \right] \right] = \frac{S}{\left(\frac{1}{2} \log x \right)^2 + S^2} \quad (4)$$

By injecting (3) and (4) into (1), one obtains:

$$\varepsilon(t) = \frac{1}{2} - \left(t^2 + \frac{1}{4}\right) \int_1^{\infty} x^{-3/4} \left[\sum_{n \geq 1}^{\infty} \sqrt{\frac{2}{\pi}} \left[\frac{n^2 \pi}{n^2 \pi + S^2} \right] \right] \left[\frac{S}{\left(\frac{1}{2} \log x \right)^2 + S^2} \right] dx \quad (5)$$

This becomes:

$$\frac{1}{2} - \left(t^2 + \frac{1}{4}\right) \left[\sum_{n \geq 1}^{\infty} \sqrt{\frac{2}{\pi}} \left[\frac{n^2 \pi}{n^2 \pi + S^2} \right] \right] \int_1^{\infty} x^{-3/4} \left[\frac{S}{\left(\frac{1}{2} \log x \right)^2 + S^2} \right] dx \quad (6)$$

Excerpt from the paper *The Fourier Laplace Approach of Proving The Riemann Hypothesis*

**FANTASTIC,
TERRIFIC**

NONSENSE !!!!!!!!!!!!!!!

Formula (1)
IS NOT equivalent to
Formulae (5) and (6)

Let's see why....

NOBODY is allowed to put in the Formula (1) the transforms in place of the functions as in the following

TRANSFORM		FUNCTION
$\sum_{n \geq 1}^{\infty} \sqrt{\frac{2}{\pi} \left[\frac{n^2 \pi}{n^2 \pi + S^2} \right]}$	= TRANSFORM of	$\psi(x) = \sum_{n \geq 1}^{\infty} e^{-n^2 \pi x}$
$\frac{S}{\left(\frac{1}{2} \log x\right)^2 + S^2}$	= TRANSFORM of	$\cos\left(\frac{t}{2} \log x\right)$

THEREFORE

By injecting (3) and (4) into (1), one obtains:

$$\varepsilon(t) = \frac{1}{2} - \left(t^2 + \frac{1}{4}\right) \int_1^{\infty} x^{-3/4} \left[\sum_{n \geq 1}^{\infty} \sqrt{\frac{2}{\pi} \left[\frac{n^2 \pi}{n^2 \pi + S^2} \right]} \right] \left[\frac{S}{\left(\frac{1}{2} \log x\right)^2 + S^2} \right] dx \quad (5)$$

This becomes:

$$\frac{1}{2} - \left(t^2 + \frac{1}{4}\right) \left[\sum_{n \geq 1}^{\infty} \sqrt{\frac{2}{\pi} \left[\frac{n^2 \pi}{n^2 \pi + S^2} \right]} \right] \int_1^{\infty} x^{-3/4} \left[\frac{S}{\left(\frac{1}{2} \log x\right)^2 + S^2} \right] dx \quad (6)$$

IS a **FANTASTIC, TERRIFIC NONSENSE !!!!!!!!!!!!!!!**

Fausto Galetto, October 25 2018