International Journal of Sciences

Research Article Volume 11 – July 2022 (07)

Rusho-Ramanujan Fourier Series

Maher Ali Rusho

Dedicated To
My Father:Dr.Mohamamd Ali
My Mother and teacher of all time :Dr.Ruma Ali
My 2'nd father : Engr.Ali Ahmmad Jewel
My 2'nd Mother :and teacher of my early age Surraya Ahmed

Abstract: In the present realm of Mathematics the most beautiful and Exciting thing is infinitive, convergence series. When Ramanuzan was young he plays with series and make new new series . In this paper I have introduced an new point of view of convergency of pie . We will first prove 2 basic theoremas using fourier analysis then we sum up this and find the value of pie .And after that we will put it in the Ramanuzan series and make a totally different series . Finally . this paper will be finished by a open question . Those who will find the answer, they please email me at :rusho.ali17@gmail.com. I will dedicate him in the next paper.

Here integration will be used by this symbol integrate()
To express power the symbol '^" will be used
The symbol pie is expressed as pie sign.
A notation is expressed as sig()

Introduction

Q(1) Find the fourier series expansion of f(x)=X in the interval (-pie,pie)
Prove using fourier series

Let f(-x)=-x be a odd function . We know that for odd function fourier series is
F(x)= SIG(n(1->infinity))b_n.sin-nx……………(1)

Here
B_n=2/pie [Integrate(0->pie) f(x) sin nx dx=2/pie(-pie [cosn*pie/pie)=-2/n (-1)^n+1—(2)=2/pie(-pie cosn*pie/pie)=-2/n*(-1)^n+1 By summing up we get =>
F(x)=x=2[sinx-sin2x/2+sin3x/3-sin4x/4+------]

Here x=pie/2 is the function evaluated. we find
F(x)-=pie/2=2[1-1/3+1/5-1/7+1/9-..+------------)

Then the series we find is

1-1/3+1/5-1/7+1/9+----------------=Pie/4

Again the finction f(x)=pie/4 is is evaluated we find :=

Pie/4=2[1/root2-1/2+1/3root2+1/6-..+..-+++)
Pie/8=1/roo2 (1+1/3-1/5- 1/7+1/9+1/11+ ....)
=pie/4

The series we found is

1+1/3-1/5-1/7+1/9+1/11-----------=pie/root(8)

After summing up both equation we find : [Pie-=2*2root(pie)-4*root(pie)]/8root(2)=1 or pie = 16*root(2)/2*root(2)-4

From Ramanujan's series we find:
2*root(2)/99! Sig(k->0-infinty)(4K)!(1103+26390k)/(k!)^4(396)^4K

=(2*root(2)-4)/16*root(2)

Here it is the broken English Rusho Rmanujan series

The open problem and abstract

We all know the following Ramanujan -Hardy Partition formula

Published at: http://www.ijsciences.com/pub/issue/2022-07/
DOI: 10.18483/ijSci.2599; Online ISSN: 2305-3925; Print ISSN: 2410-4477

Maher Ali Rusho (Correspondence)
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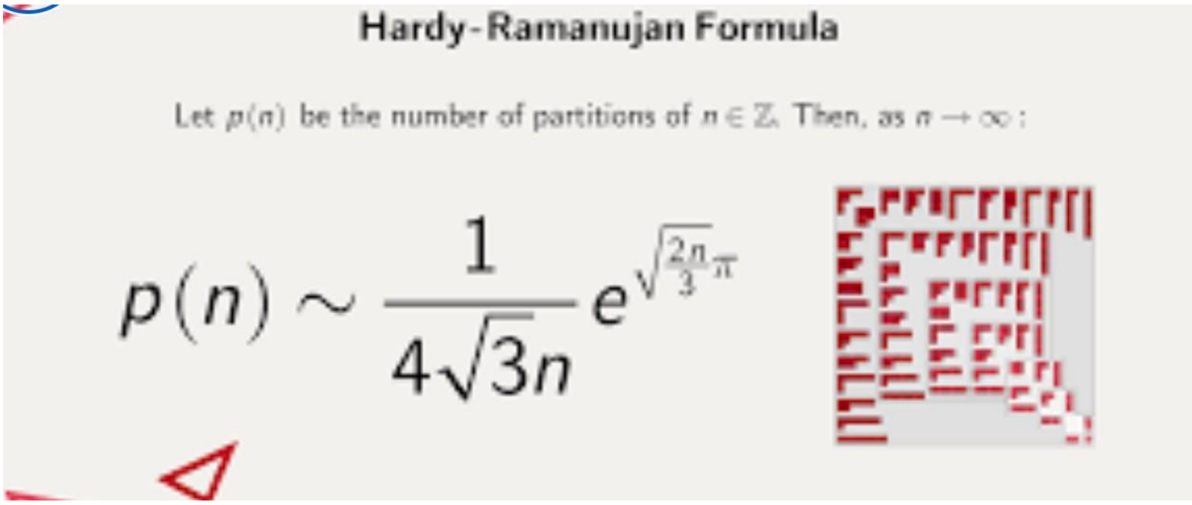

*Src:*https://www.newscientist.com/article/dn20039-deep-meaning-in-ramanujans-simple-pattern/

Can anyone tell me What if We put the negative value of n. Will the formula work for negative values. Will this formula wrok like minus 121 is a number. How many ways it can be partitioned. If The reader knows the answer then please contact with my website: rusho.org or email: rusho.ali17@gmail.com