Re: The big bang, the primes, and the RH

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- *From*: S_Paske@xxxxxxxxxxx
- *Date*: Fri, 21 Mar 2008 23:11:21 −0700 (PDT)

On Mar 22, 12:42 am, S_Pa...@xxxxxxxxxxx wrote:

> Imagine an array of squares leading off to infinity.
> Now let me ask what is the the probability of picking a particular
> square at random from the first N.
> From the first N, the probability is just 1/n, but for the rest, the
> probability must be 1 because
> there is an infinite array. So let me assign this Probability
> function:
>
> p(n)=(1+1/n)^n
>
> Of course, this function makes no sense and cannot possibly be
> accurate. For finite n,
> this is true. However, as n increases to infinity, this function tends
> to e^oo, and i submit it makes perfect sense.
> As n increases to infinity, the probability of picking the middle
> square tends to 1/2.
>
> Now, let me ask this question for the plane.
> Draw a unit square at the origin
>
> ... 15 14
> 5 4 3 13
> 6 1 2 12
> 7 8 9 11
> 10...
>
> Draw a circle around 1 call this 1/zeta(oo)
> ...
>
> As the area of the unit square used to draw the spiral tends to 0, the
> integers are mapped to the plane.
> The integers <= k^2 are always bound by the circle created by 1/
> zeta(OO−k).
>
> Let the radius of the circle 1/zeta(oo) = 1.
>
> Now, what happens if we consider another circle with radius 1/

sqrt(pi*n)
We can say that the area of the unit circle is:
f(n)=(1+1/n)^n
Of course, this function fails for finite n, but as n−>oo f(n)−−>1

But what does this tell us about the primes?

In the ulam spiral unit circle, the square free intergers are symetric about 1/zeta(2). Euler has shown this. The 'probability' of picking a square free rational is symetric around 1/zeta(2) because in ulam spiral space, ALL of the square free rationals between 0 and 1 lie on the circle with radius 1/zeta(2).How do we know this? Euler has proven that the sum of the square free rationals 'inside' the circle is equal to the sum 'outside' the circle, namely 0.
All of the cube free rationals lie on the circle 1/zeta(3).
Now, i ask you. Where do the primes lie in ulam sprial space?

Actually, those rationals where all prime factors have a 2 for their exponet lie on 1/zeta(2).
Those that have prime factors where all exponents = 3 lie on 1/ zeta(3). But these are just squares.
Thus we have, squared the circle.
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