

Selected quotations from Matthew Watkins' website

<http://secamlocal.ex.ac.uk/~mwatkins/>

"Prime numbers have always fascinated mathematicians... There seems to be some order or pattern, just a little below the surface, just a little out of reach."

Elementary Number Theory, Underwood Dudley, (Freeman, 1978)

"...there is a sense in which we can give a one-line non technical statement of the Riemann hypothesis:

"The primes have music in them".

M.V.Berry and J.P.Keating from "The Riemann Zeros and Eigenvalue Asymptotics" (SIAM Review 41, no.2 (1999), page238.)

"To me, that the distribution of prime numbers can be so accurately represented in a harmonic analysis is absolutely amazing and incredibly beautiful. It tells of an arcane music and a secret harmony composed by the prime numbers."

"Prime Territory: Exploring the Infinite Landscape at the Base of the Number System", E. Bombieri (The Sciences, Sept/Oct 1992)

"...Riemann was able to see beyond the pattern of the primes to discern traces of something mysterious and mathematically elegant at work...

from the dustjacket of Prime Obsession, J. Derbyshire(John Henry Press, 2003)

"I sometimes have the feeling that the number system is comparable with the universe that the astronomer is studying...The number system is something like a cosmos."

M. Jutila, quoted in "Beautiful Mathematics", Karl Sabbagh, Prospect, January 2002

"The Riemann Hypothesis... what it's connected with, what it implies, where it comes from, can be very unobvious."

M. Huxley, quoted in Dr.Riemann's Zeros, Karl Sabbagh (Atlantic, 2002)

"Sometimes I think that we essentially have a complete proof of the Riemann Hypothesis except for a gap. The problem is, the gap occurs right at the beginning, and so it's hard to fill that gap because you don't see what's on the other side of it."

H. Montgomery, quoted in Dr. Riemann's Zeros, Karl Sabbagh (Atlantic, 2002)

"Why do the primes achieve such a delicate balance between randomness and order?.....What secrets are locked within the primes?"

"Prime Time", E. Klarreich, (New Scientist, 11/11/00)

"I have sometimes thought that the profound mystery which envelops our conceptions relative to prime numbers depends upon the limitations of our faculties in regard to time, which like space may be in essence poly-dimensional ..."

J.J. Sylvester, from "On certain inequalities relating to prime numbers", Collected Mathematical Papers, Volume 4 (Chelsea, New York, 1973)

The following quotes are from *The Music of the Primes*, Marcus de Sautoy (Harper Perennial 2003)

“The primes are....timeless numbers that exist in some world independent of our physical reality.”(p5)

“ ...prime numbers ... have a timeless, universal character. Prime numbers would be there regardless of whether we had evolved sufficiently to recognise them." (p6)

“...Riemann had found new ears with which to listen to these mysterious tones. The sine-like waves that Riemann had created from the zeros in his zeta landscape revealed some hidden harmonic structure." (p.93)

"We have all this evidence that the Riemann zeros are vibrations, but we don't know what's doing the vibrating." (p.280)

"Maybe ... what we are missing is simply a different way to understand these enigmatic numbers.... Maybe there is an alternative viewpoint that no one has found because we have become so culturally attached to the house that Gauss built." (p.312)