

# Re: What do you think of this argument

---

*Source:* <http://sci.tech-archive.net/Archive/sci.math/2009-06/msg00371.html>

---

- *From:* Bill Dubuque <[wgd@xxxxxxxxxxxxxxxxxxxxxxxx](mailto:wgd@xxxxxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* 30 May 2009 17:00:43 -0400
- 

Ludovicus <[luiroto@xxxxxxxx](mailto:luiroto@xxxxxxxx)> writes:

Dennis Sciama as cited in Gardner's "New Mathematical Diversions" arguments:

...consequently if the assertion is undemonstrable it must be true.

The same is valid for any assertion whose falsity can be verified by a counterexample.

Marcus de Sautoy in his book : "The Music of the Primes" arguments:

If someone succeeded on demonstrating that the hypothesis is undecidable from the Mathematicsl axioms then the hypothesis results demonstrated as true.

From my prior post on 23 May 2008:

William Elliot <[ma...@xxxxxxxxxxxxxxxxxxxxxxxx](mailto:ma...@xxxxxxxxxxxxxxxxxxxxxxxx)> wrote:

What if, what if Goldbach's conjecture was unprovable?

If GC is independent of arithmetic then it is necessarily true, because arithmetic is strong enough to verify any counterexample. Technically one says that Peano arithmetic is Sigma-1 complete, meaning that it is strong enough to provide proofs for all true Sigma-1 (existential) formulas. For further discussion see my prior posts in the threads [1], [2].

--Bill Dubuque

[1] <http://google.com/groups?selm=y8zofcrm96d.fsf%40nestle.ai.mit.edu>

[2] <http://google.com/groups?selm=y8zhemkbuep.fsf%40nestle.ai.mit.edu>

.