Re: Proof Attempt For Fermat's Last Theorem

Source: http://sci.tech−archive.net/Archive/sci.math/2007−03/msg03824.html

- *From*: Gottfried Helms <helms@xxxxxxxxxxxxx>
- *Date*: Sat, 17 Mar 2007 22:09:59 +0100

Am 15.03.2007 07:24 schrieb jiahao_anti−addictgamer@xxxxxxxxxxx:

> On Mar 15, 2:21 pm, "Tonico" <Tonic...@xxxxxxxxx> wrote:
>
> > On 14 mar, 16:09, jankri...@xxxxxxxxxxx wrote:> On 14 Mar, 10:13, jiahao_anti−addictga...@xxxxxxxxxxx wrote:
> >
> > > > On Mar 14, 4:26 pm, "Tonico" <Tonic...@xxxxxxxxx> wrote:
> > > >
> > > > > ***************************************
> > > > > Hope no more: you ARE
> > > > > mistaken.
> > > > > Tonio
> > > >
> > > > The proof has been sent . Whether it is
> > > > flawless or not , it all
> > > > depends on Jay to verify it now .
> > >
> > > Flawed, as expected. :−)
> > > I have e−mailed the refutation.
> >
> > ********************************
> > I'm shocked! A flawed proof of FLT by a math fan BUT NOT a mathematician, who also loves to gossip about how REAL mathematicians behave/research/work?? Nooooooo....really???!!!! That hardly happens....what, some 4−5 times ONLY in the last 3−4 months and ONLY in the NG??
> > Anyway, when I wrote "hope no more...etc." I was in fact refering to Bassam, not to Jiahao...
> > Regards
> > Tonio
> > Pd. BTW, it seems to have been a rather gross flaw and in the first page, uh? I mean, from what I read....I haven't seen the paper, though.
>
> I have made the hard desciion of presenting my paper to everyone .
> It may put me in the deepest shame but this will not ruin my passion

> for mahematics .
> Besides , when Wiles was young , he too had many flawed proofs . It takes time to learn from your mistakes and finally suceed .

I propose to start studying

$$x^p - y^p = z^p = (x-y)\, Q1^{q1}\, Q2^{q2}\, Q3^{q3} \ldots$$

in terms of primefactorization (where Q1,Q2,... are primes), considering the question: what can I know about the possible primefactors and the possible exponents. Then also about the primefactors of (x−y): can this have some prime−factors of the set Q1,Q2,Q3,... ? Has p a special role? (Note, if the Q−primefactors are not in (x−y), they all must have the same exponent q1=q2=q3=p, if they are, the sum of their exponents in the two partial−products must equal p)

When I started with this questions I stepped into many very interesting fields with many open questions, like Mersenne numbers, squarefreeness of Mersenne numbers, Sophie Germain−primes, cyclotomic polynomials, the catalan problem (a^p − 1^p =?= b^q) and always, after I found a "pattern" and then a rule, I also found exciting articles in the internet and in the library, where true explorative minds had already considered these problems and often had beautiful approaches and proofs, Euler, Szygmondi (? spell) to mention only two. The dead end for me was then the problem of the difficult properties of Wieferich primes, (and the possibility of double wieferich pairs) and the general description for their occurence and their degree (which seems still out of reach in NT)).

Although this path seems not to be successful for FLT, one can learn a lot about similar problems. And with the concept of cyclic subgroups many diophantine exponential problems can easily be solved, even on high−school level.

So my proposal is: try to find applicable rules for the occurence of powers of primes for expressions like

$$x^n - y^n$$

based on varying n, not only primes, (if you did not already study this). Apply that rules to interesting well known problems like Mersenne−numbers, Catalan and the like to find the limit of their explanatory power. For me I dealt with this about a year (as an about−amateur from the scratch) and that was full with adventure, discovery and learning.

Happy mathing −

Gottfried Helms

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