

Will we find another Mersenne prime?

Undergraduate Math Club
CORNELL UNIVERSITY

M _n	Status	Details					
82589933	Prime						
	LL	Status	Date	User	Residue	Shift	
		Verified	2018-12-07	punkboy15	0000000000000000	1122232	
	History	Date	User		Type	Result	
		2018-12-07	punkboy15		P-LL	M82589933 is prime!	
		2017-08-12	La Güira		NF-PM1	B1=730000, B2=14417500	
		2016-12-18	Mark Rose		NF	no factor from 2^74 to 2^75	
		2016-12-16	RichD0		NF	no factor from 2^73 to 2^74	
		2016-11-17	Judge Hale		NF	no factor from 2^72 to 2^73	
		2016-11-17	Judge Hale		NF	no factor from 2^71 to 2^72	
		2011-03-26	steinrar		NF	no factor from 2^70 to 2^71	
		2011-03-26	steinrar		NF	no factor from 2^69 to 2^70	
	2011-03-26	steinrar		NF	no factor from 2^68 to 2^69		
	2011-03-26	steinrar		NF	no factor from 2^67 to 2^68		
	2011-03-26	steinrar		NF	no factor from 2^65 to 2^67		
	2010-12-15	Architects Cubed		NF	no factor from 2^64 to 2^65		

SPEAKER

Jessie Tan

ABSTRACT

Mersenne primes are primes that are one less than a power of two. They are very useful for forming even perfect numbers, but very useless for RSA encryption. Besides Euler's enhanced trial factoring and the Lucas-Lehmer test, we haven't made much progress at understanding them. Millions of CPUs are currently searching of those primes brute-force, but no one knows if we will find another.

FEB 17 at 5:15pm
Malott 532 ★ Refreshments