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Great Internet Mersenne Prime Search

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The *Great Internet Mersenne Prime Search* (or *GIMPS* for short) is a distributed computing effort to find Mersenne primes. The project was started by computer programmer George Woltman. Volunteers to allow GIMPS to use their own personal computers to test Mersenne primes and send the results back to a central database.

As of 2006, the ten largest known Mersenne primes have been found by GIMPS. The project has also motivated Woltman to write some of the fastest integer multiplication subroutines available today.

<http://www.mersenne.org/>Official website

The latest (June 15, 2009) results confirm that the 47th Mersenne prime has been found. Mersenne primes are factors of even perfect numbers. This means we have a new perfect number.

As the newest, it is not the largest. A larger one was found in August 2008. However, the latest is a very big number. The Mersenne prime: $2^{42,643,801}-1$ is a 12,837,064 digit number. The perfect number has twice as many digits.

It was actually found in April. It took two months to confirm.