Department of Computer Sciences Purdue University West Lafayette, IN 47907 November 3, 2016

Nine "Most Wanted" numbers from the wanted lists issued with Page 131 were factored on Page 132. NFS@Home factored 2,1009+, 3,617-, 5,422+, 6,383-, 7,353-, 7,353+, 11,283-, 11,283+ and 2,1028+, all by the Special Number Field Sieve.

Six "More Wanted" numbers from the wanted lists issued with Page 131 was factored on Page 132. NFS@Home factored 2,1019+, 2,1934M, 2,1954M, 2,1982M, 12,271- and 12,271+, all by the SNFS.

Four "Smaller-but-Needed" numbers from the wanted lists issued with Page 131 was factored on Page 132, all by the General Number Field Sieve. I factored 12,323—. NFS@Home factored 7,401—, 3,790+ and 5,485+.

New wanted lists are enclosed.

NFS@Home is a group led by Greg Childers.

There were no new champions for factoring Cunningham numbers on this page. A list of recent champions is enclosed.

The first holes factored on Page 132 are in # 6364, # 6365, # 6366, # 6367, # 6368, # 6369, # 6370, # 6371, # 6372, # 6374, # 6375, # 6376, # 6378, # 6379, # 6380, # 6381, # 6382, # 6383, # 6386 and # 6388. No second hole was factored on Page 132. The only third hole factored on Page 132 is in # 6377. The only fourth hole factored on Page 132 is in # 6389. No fifth hole was factored on Page 132.

The smallest new factor reported on Page 132 has 62 digits. See # 6390. The largest number factored on Page 132 has 307 digits. See # 6386.

See the URL http://www.prothsearch.net/fermat.html for a list of all known Fermat factors. Several new factors were found since the last page.

No new Mersenne prime was found since the last page. The current largest known prime is still $2^{74207281}$ —1. See the URL http://primes.utm.edu/primes/ for Chris Caldwell's database of the largest known primes (updated hourly).

See the URL http://homes.cerias.purdue.edu/~ssw/cun/index.html for the online Cunningham book.

Please send me any address changes.

Keep the factors coming!

Sam Wagstaff