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Mersenne primes and class field theory

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Appendix

The set of currently known exponents $p \in \mathbb{Z}_{>0}$ such that $2^p - 1$ is a Mersenne prime, is

{2, 3, 5, 7, 13, 17, 19, 31, 61, 89, 107, 127, 521, 607, 1279, 2203, 2281,
3217, 4253, 4423, 9689, 9941, 11213, 19937, 21701, 23209, 44497, 86243,
110503, 132049, 216091, 756839, 859433, 1257787, 1398269, 2976221,
3021377, 6972593, 13466917, 20996011, 24036583, 25964951, 30402457,
32582657, 37156667, 42643801, 43112609}.

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