# Counting Twin Primes 

Islem Ghaffor

Department of Mathematics, Faculty of Mathematics and Informatics University of Sciences and Technology, Oran, Algeria
ghaffor.prime@outlook.com

Keywords: Twin prime conjecture, the cardinal of the set, prime-counting function.

In this talk we give two new formulae which count exactly the quantity of twin primes not greater than a certain given value $36 n^{2}+60 n+21$ and $p_{n}^{2}-3$. We use in these formulae the arithmetic progressions and the cardinality. In the first formula we do not need to make any "primality" test and in the second formula we use the n-th prime number and we show the relation between counting primes and twin primes. We would also say that we have produced new algorithms to make such count.

Acknowledgements. I am thankful to Prof. Roger Heath-Brown (Head of Number Theory Group, University of Oxford, United Kingdom) and Prof. Zhi-Wei Sun (Editor-in-Chief of Journal of Combinatorics and Number Theory, Nanjing University, People's Republic of China) for saying about my work it seem to be correct.

## References

[1] G. H. Hardy, E. M. Wright, An introduction to the theory of numbers, Oxford, 1979.
[2] R.K. Guy, Unsolved problems in number theory, New York: Springer-Verlag, 2004.

