



<https://compositio.nl/#foundation>

The jury for the 2014–2016 prize was composed as follows:

- Klaus Hulek (chair)
- Wenwei Li
- Ravi Vakil

They declared as winning article:

*James Maynard, Dense clusters of primes in subsets.
Compos. Math. 152 (2016), no. 7, 1517–1554*

A celebrated result of Maynard (and discovered independently by Tao) established that for any natural number k one can find infinitely many intervals of bounded length $C(k)$ containing at least k primes.

This paper gives a vast generalization of such a result to subsets of the primes meeting certain equidistribution criteria, and with special attention to the uniformity in k .

For example, the paper establishes that there are intervals of length $(\log x)^\epsilon$ that contain at least $C(\epsilon) \log \log x$ primes for some positive $C(\epsilon)$. Since a typical interval of such length contains at most one prime, these intervals may be thought of as containing dense clusters of primes.

Another striking example of the results in this paper: there are arbitrarily large intervals of length $\epsilon \log x$ containing $m \geq \epsilon \log \log x$ consecutive primes all lying in the same reduced residue class $a \pmod{q}$.

The prize object



This is a model of a cubic surface, with 4 singularities, and 9 real lines.

In the list of 45 topological types by Knörrer and Miller it is number 27.

See the article http://www.oliverlabs.net/data/vis_real_cs.pdf by Holzer and Labs.