

## Matrix Individualism conjecture

The key problem of MIT (matrix individualism theory) is to find a way to fill a square matrix of size  $N$  by numbers 1 to  $N$  in such a way that no row or column or diagonal contains two equal numbers, diagonal here is any line in matrix with  $\pm 45\%$  slope. This definition of diagonal ( $\pm 45\%$ ) refers only to 1-st order individualism, later I will give a clear definition of higher order matrix individualism as well

It is conjectured by the author of this document that for first order matrix individualism it is possible to fill any matrix of size  $N$  which has only primes higher or equal to 5 in its prime number decomposition. For instance for  $N = 5$  we have the following matrix with matrix individualism of order 1:

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12345
34512
51234
23451
45123
```

It will be also possible to create such matrix for  $N = 35 = 5*7$  or for  $N = 1973*19$ , but not for any even  $N$  or for any  $N$  divisible by 3.

The theory is extended for higher order individualism about which I will write a document later giving definition of higher order diagonals and it is conjectured that for any higher order there exist unique prime number  $P$  such that if  $N$  is composed of primes higher or equal to that prime the individualism is always possible and if  $N$  has a factor lower than  $P$  individualism is always impossible. It is clear that higher order matrix individualism implies lower order individualism.

At the end of this short introduction into MIT I want to say that I still don't have any proof for 1-st order matrix individualism conjecture described above, and do you have?

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