

Too many magnets

There was a task at the International Physicists' Tournament in 2017: "How many magnets can be accommodated within a given surface area before the structure collapses and the magnets stick together? How does the maximal area number density of magnets depend on the important parameters?". This report describes the process of emergence of the instability in the configuration of the magnets, that are on the plane, and the reasons of their collapse. Theoretically we have found a safe distance at which magnets can be placed, and their density that depends on the parameters of the magnets was found, too.

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