

Some symmetry result for convex n-gons.

Ilaria Fragalà

Politecnico di Milano

I will discuss some shape optimization problems for convex polygons with a prescribed number of sides, focusing in particular on the following topics and on the different ways symmetry can be obtained in each case:

- Discrete isoperimetric type inequalities
- Discrete Faber-Krahn type inequalities
- Overdetermined boundary value problems on polygons.

Some related open problems and conjectures will be addressed.