The Committee unanimously decided to propose Guido De Philippis as the recipient of the Caccioppoli prize 2022 with the following motivation:

Guido De Philippis (born in Fiesole on August 16, 1985) is the author of over 60 papers giving outstanding contributions to many areas of Mathematical Analysis and providing a number of truly breakthrough results.
Here we recall

- his result in collaboration with Figalli on the optimal regularity for solution u to Monge-Ampère type equations with density bounded away from zero and infinity, namely $(D^2)u$ belongs to Llog (Invent. Math. 2013);
- his results with Figalli on the partial regularity of optimal transport maps on general Riemannian manifolds, proving that the optimal maps are smooth outside a closed set of Lebesgue zero measure;
- his work with Rindler on Annals of Math (2016) on the fine structure of vector valued measures constrained by linear PDEs with constant coefficients matrices, which covers, in the case of curl operator, the well known Alberti's rank-one theorem, and provides much more. These results were described by him in the invited lecture at the International Congress of Mathematicians (ICM) 2018;
- his works on Plateau's problem in codimension higher than one (Adv. Math. 2016), and on an anisotropic version of Allard's rectifiability Theorem (Comm. Pure Appl. Math. 2018);
- his result on the higher regularity for the gradient of local minimizers of the Mumford-Shah energy in any dimensions, which gives a positive answer to a conjecture of De Giorgi, previously solved only for n = 2 by De Lellis and Focardi with a completely different approach;
- his work with the proof of the sharp quantitative version of Faber-Krahn inequality conjectured by Nadirashvili, not relying on the well known quantitative isoperimetric inequality of Fusco-Maggi-Pratelli, but on a suitable analogue of the Ekeland's variational principle and on delicate regularity arguments for free boundary problems.
More recently with Spolaor and Velichkov he proved a fundamental regularity theorem for the free boundary of the minimizers of the two-phase Bernoulli problem (Invent. Math. 2021) completing the classical work by Alt, Caffarelli and Friedman.