Concavity properties of solutions to Elliptic PDEs and related inequalities

Paolo Salani

Department of Mathematics and Computer Science, Università di Firenze (Italy)

`paolo.salani@unifi.it`

I will review some known results and present some new results about concavity properties of solutions of elliptic pdes in convex domains. Time permitting, I will show how these properties are connected to analytic-geometric inequalities of Brunn-Minkowski type for related functionals.

References

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