

ASYMPTOTICS FOR A COMPLIANCE-LOCATION PROBLEM

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The characterization of asymptotical configurations in the optimal location of resources recently received a lot of attention, and the approach based on Γ -convergence seems very fruitful. We quote for instance

- [1] where the so-called *location problem* of n points is studied in the framework of mass transportation theory.
- [3] where the location problem is studied in dimension two, and it is shown that for large n the optimal configuration approaches the one given by the centers of regular exagons.
- [4] where the same analysis is made for the so-called *irrigation problem*, i.e. with points replaced by connected one-dimensional sets of total length L .

We studied in [2] a similar problem where the optimal location of a given number of point for the elastic compliance functional is considered.

References

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- [4] S. MOSCONI, P. TILLI: Γ -Convergence for the Irrigation Problem. J. Convex Anal., **12**, no.1 (2005), 145–158.