

Singularities in PDE and the calculus of variations
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Variational problems arising in biology

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Abstract

We will describe some variational problems arising in biology and related to classical questions such as sphere packing, optimal partitions, closed geodesics and minimal surfaces. In particular, for the problem of minimal clusters we describe analytical and numerical results related to the topological properties of nondegenerate, locally area minimizing configurations.

Joint work with *Clara Garza*.