

On a long range segregation model

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In this talk we will present the main results about a free boundary problem arising from a long range segregation process. In this model, the growth of a population u_i at x is inhibited by the populations u_j in a full area surrounding x . This will force the populations to stay at distance 1 from each other in the limit configuration, and so the free boundary will be a strip along the support of the population with size exactly one. The talk is based on joint work with Luis Caffarelli and Stefania Patrizi.

References:

- [1] L. Caffarelli and S. Patrizi and V. Quitalo: On a long range segregation model, *arXiv preprint arXiv:1505.05433*, submitted (2015).