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**Strong gravitational lensing mass mapping
using genetic algorithm**

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Reconstructing the 2D mass distribution of a gravitational lens is a challenging problem, especially for non-parametric methods without light traces mass assumptions. In such methods there could be 1000's of free parameters. Optimizing for such high dimensionality is beyond the scope of standard Bayesian techniques. In this talk I will demonstrate an alternative method, which is not very much explored in astronomy, namely genetic algorithm. Using genetic algorithm I will re-sketch the problem, and introduce a public library named GRALE for non-parametric gravitational lensing mass reconstruction.