Computational Financial Statistics

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Project description

- $dX_t = \mu(t, X_t, \theta)dt + \sigma(t, X_t, \theta)dW_t$.
- Parameters θ
  - needed in risk management of financial derivatives,
  - estimated from data using Maximum Likelihood Estimation (MLE).

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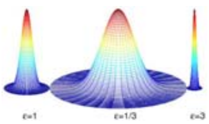
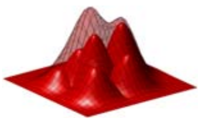
Project description cont.

- Techniques to compute MLE:
  - Series expansions.
  - Monte Carlo methods.
  - PDE methods (Kolmogorov forward equation).
- Radial basis functions:





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Research team

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