Approximate Bayesian Computation

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Introduction

Objective

The objective of this presentation is to give an overview of the Approximate Bayesian Computation (ABC) algorithm through the replication of the paper **Approximate Bayesian computational methods** by Marin et. al (2012).

The paper talks about different variants of ABC by estimating the posterior of Moving Average models.

Motivation

ABC methods are known as likelihood-free techniques, thus are a useful approach in problems that the likelihood is intractable, e.g., likelihood not available in closed form, or likelihood too expensive to calculate.

- Coalecent models in population genetics [4];
- Species dynamics [1];
- Real-world model of HIV transmission [3].

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References

Some references to showcase [allowframebreaks] [2]

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