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THE SIS ALGORITHM AND ITS APPLICATIONS

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Abstract.A systematic use of the *Monte Carlo* method appeared since the early days of electronic computing and since then it is more present in different scientific research fields. Therefore, many techniques were developed based on this method and one of them is called *sequential importance sampling*. This technique is an adaptation of the Monte Carlo method that can be used to better extract samples form the domain using an importance weight function.

Key words:importance sampling, sequencial Monte Carlo, inference, importance weight

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