**Summary**

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Progress

1. Notation
2. Objective function of evaluation problem
3. Optimization techniques of evaluation problem
4. Extend to off-policy case

Discussion:

1. Relationship between variance related to sample () and policy
2. The variance related to importance sampling. The difference between importance sampling in a Markov process and a distribution.
3. Objective function with regularization. The influence brought by regularization (influence on what?).
4. The relationship between different objective function. Is the bound between MSE and MSBE tight?
5. Non-linear function approximation (e.g. kernel method). And it’s influence on objective function.
6. How to select behavior policy. Is it possible to use more than one policy? How this change can influences the evaluation process?