

OpenCL Library for Computing Disconnected Contributions using FPGAs

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We introduce an OpenCL library for computation of disconnected contributions for application with FPGAs and GPUs. We look at the advantages of FPGAs vs. traditional GPUs for stochastic estimation of disconnected contributions, as well as gains achieved with enhancements such as mixed precision and the truncated solver method. We also prospectively consider variance reduction algorithms and the advantages that can be provided with FPGAs.

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