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## Staggered fermions simulations on GPUs

*Tuesday, 15 June 2010 18:00 (5 minutes)*

We will show our implementation of the RHMC algorithm for staggered fermions on Graphics Processing Units using the NVIDIA CUDA programming language. While previous studies exclusively deal with the Dirac matrix inversion problem, our code performs the complete MD trajectory on the GPU. After pointing out the main bottlenecks and how to circumvent them, we discuss the performance of our code.

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talk

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**Track Classification:** Algorithms and machines