

## Heidelberger Kolloquium Medizinische Biometrie, Informatik und Epidemiologie

Sehr geehrte Damen und Herren,

hiermit laden wir Sie herzlich ein zu dem Vortrag:

### “Bayadera: Bayesian Data Analysis on the GPU“

von

**Dragan Đurić**

Institute of Modern Technology Montenegro, Podgorica

**am Montag, 16.04.2018, 16.15 Uhr**

im Kommunikationszentrum des DKFZ, Hörsaal **K1**, Im Neuenheimer Feld 280, 69120 Heidelberg

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In the meantime, here is the abstract: Have you ever seen hierarchical probabilistic models computed in milliseconds? Now it is possible, on a low-cost desktop machine, from a dynamic and interactive REPL environment in Clojure. This talk presents Bayadera, an opinionated Bayesian statistical library backed by a high-speed massively parallel MCMC engine that runs on the GPU. Bayadera has been designed with programmers in mind; it is optimized not only for dynamic, interactive model-building and experimentation, but also to provide fast performance in production. There is even more; Bayadera has been written in Clojure, which is a pragmatic modern Lisp dialect that runs on Java Virtual Machine, and plays well with the Java ecosystem. The talk will introduce interactive development in Clojure, an infrastructure for high-performance numerical computing provided by Uncomplicate libraries, and give a walk-through of real model building and fitting from one of the later chapters of the Doing Bayesian Data Analysis book.

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Alle Interessenten sind herzlich eingeladen!

Gezeichnet: Dickhaus, Gabrysch, Kieser, Knaup, Kopp-Schneider, Wellek

**Organisation: Birgit Schleweis**

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