Internships in GPU-based molecular dynamics simulations

August 2018

The *Glass and Time* center at Roskilde University is inviting students at the graduate or undergraduate levels for 2-4 internships. The internships start Monday 6th of August (2018) and end Friday 31th of August.

After being introduced to GPU-based molecular dynamics, you will perform a numerical molecular-dynamics study of a well-defined, fundamental scientific question in the field of liquid-state theory or beyond. *Glass and Time* has exclusive access to a GPU-cluster with 400 TFLOP peak performance. You will be assigned a supervisor with whom you will work closely.

Accommodation is provided free of charge near the university; travel costs and living expenses are covered up to a maximum of 15,000 DKK.

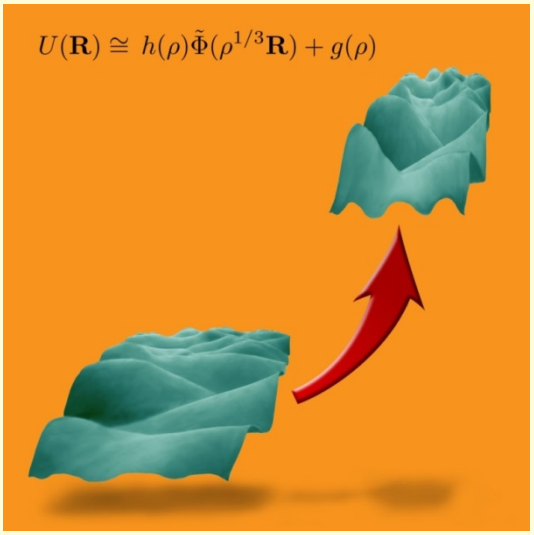
After the internship you will have gained skills in

1. Setting up a molecular-dynamics simulation
2. Analyzing simulation data
3. Performing simulations on high-performance GPU-based supercomputers

Interested applicants are invited to submit an application before May 31, which should include

1. A single page explaining your background and scholarly interests;
2. A brief CV;
3. Exam documentation of your highest academic degree.

Applications are sent to Prof. Jesper Hansen via an e-mail to jschmidt@ruc.dk, who can also be contacted for more information. - The internships are financed by the VILLUM *Matter* project directed by Prof. Jeppe Dyre.



It was recently discovered that many liquids' and solids' potential-energy hypersurfaces undergo a simple affine deformation when density is changed. *Matter* explores this fact's many consequences for material properties.