Postdoc position in Theoretical Computer Science

The Theory group at KTH Royal Institute of Technology invites applications for a **postdoctoral position in Theoretical Computer Science with a focus on proof complexity and connections to SAT solving.**

KTH is the leading technical university in Sweden, with education and research spanning from natural sciences to all branches of engineering including architecture, industrial management and urban planning. The Theory group at KTH (www.csc.kth.se/tcs/) offers a strong research environment covering a wide range of research topics such as complexity theory and approximation algorithms, computer and network security, cryptography, formal methods and natural language processing. The group has a consistent track record of publishing regularly in the leading theoretical computer science conferences and journals worldwide, and the research conducted here has attracted numerous international awards and grants in recent years.

We are seeking a postdoc for the research project "Understanding the Hardness of Theorem Proving" in the area of proof complexity with connections to SAT solving.

In this project, we aim to advance the frontiers of proof complexity by studying proof space and connections between proof size and proof space, a line of research that has seen exciting developments in the last decade. We also intend to attack (and hopefully make progress on) some of the more classical long-standing open problems in the field. Our hope is then that we can leverage this theoretical research to shed light on questions related to SAT solving. A more detailed description of the project can be found at www.csc.kth.se/~jakobn/project-proofcplx.

The project is led by Jakob Nordström (www.csc.kth.se/~jakobn) and is financed by a Starting Independent Researcher Grant from the European Research Council. The postdoctoral researcher will be part of a team consisting also of the PI and two PhD students. Travel funding is included, and the group also expects to continue receiving short-term and long-term visitors on a regular basis.

This is a full-time employed position for one year with a possible one-year extension. The successful candidate is expected to start in August-September 2012, although this is to some extent negotiable.

The **application deadline is January 31, 2012**. More information and instructions how to apply can be found at www.csc.kth.se/~jakobn/openings/D-2011-0603-Eng.php. Informal enquiries are welcome and may be sent to Jakob Nordström.