

~ ICC-IMR Seminar ~

**Public Resource Computing – Technologies,
Applications, and Trends.**

Prof. Christian Schröder

Computational Materials Science & Engineering
University of Applied Sciences Bielefeld, Germany

Nov. 22(Mon.) 13:30-14:30, Seminar Room#601,
6th Floor, Bldg 3)

The majority of the world's computing power is no longer in supercomputer centers and institutional machine rooms. Instead, it is now distributed in nearly one billion personal computers all over the world. This change is critical to scientists whose research requires extreme computing power. The first so-called “public resource computing” (PRC) project SETI@home has attracted more than two million participants who donate time on their home PCs to a scientific effort. Work is underway to create similar projects in many other areas, enabling scientific explorations that were previously infeasible.

Our PRC project Spinhenge@home is not just one of the largest projects in the world, it is the first and only project that deals with the simulation of complex magnetic structures by means of spin dynamics methods. The implications of the “public resource computing” paradigm are social as well as scientific. It provides a basis for global communities centered around common interests and goals. It creates incentives for the public to learn about current scientific research.

In this talk I will give an overview of the new and fascinating PRC technology and discuss its potential in the context of modern high performance computing challenges for academic and industrial applications.

問い合わせ先 磁気物理学部門 野尻浩之 (215-2017)