IBM MRC Workshop on

Materials, Devices and Technologies for new Computation Paradigms

August 6-7, 2012

The *IBM Materials Research Community Workshop on new Computation Paradigms* will bring together leading experts from academia and industry in the areas of quantum and neuromorphic computing.

It is intended to provide a platform for intense discussions and exchange among scientists in the field and to point towards promising directions for research and future applications.

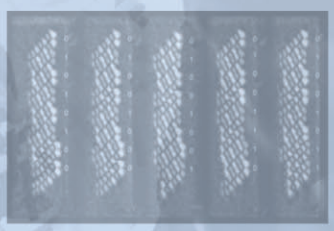
The workshop will focus on the following topics:

- *Quantum Computing*: superconducting qubits, spin qubits, NV-centers in diamond, solid state QC architectures, silicon as a material for QC

- *Neuromorphic Computing*: synaptic memory devices such as Re-RAM, CBRAM, and PCM, crossbar topologies, directions and progress toward brain-scale simulators

Invited speakers:

Dominique Bougeard	U. Regensburg
Oliver Dial	Harvard
Leo Kouwenhoven	TU Delft
Daniel Loss	U. Basel
Michelle Simmons	UNSW
Matthias Steffen	IBM
Andreas Wallraff	ETHZ
Jörg Wrachtrup	U. Stuttgart



Kailash Gopalakrishnan	IBM
Duygu Kuzum	Stanford
Yusuf Leblebici	EPFL
Wei Lu	U. Michigan
Karlheinz Meier	U. Heidelberg
Rainer Waser	U. Aachen
David Wright	U. Exeter

Venue:

IBM Research - Zurich
Säumerstrasse 4
8803 Rüschlikon
Switzerland
www.zurich.ibm.com

Conference Chairs: Alessandro Curioni, Mark Ritter

Sponsored by the IBM Materials Research Community

Registration:

For attendance, please register before July 23rd by e-mail to:
ago@zurich.ibm.com
There is no registration fee
Number of participants is limited