AComIn Transfer Technology Seminar on Walk on Equations and Sequential Monte Carlo to Solve Linear Systems

The technology transfer Seminar on Walk on Equations and Sequential Monte Carlo to Solve Linear Systems with lecturer Prof. Sylvain Maire from Laboratoire IMATH équipe MNC was held during the 8-th International Conference on Numerical Methods and Applications, NMA'2014, 20-24 August, 2014, Borovets.

The discussion on 21st August 2014 was structured around the special session on "Monte Carlo and Quasi-Monte Carlo methods"(see attached program) with speakers introducing topics such as:

- *Kinetic Monte Carlo Simulation of Statistical Reliability in Nanoscale CMOS, by Asen Asenov*
- *Sensitivity Analysis of Design Parameters for Silicon Diodes, by J.M.Sellier, R.Georgieva, I.Dimov*
- *Optimized Particle Regeneration Scheme for the Wigner Monte Carlo Method,* by P. Ellinghaus, M. Nedjalkov, S. Selberherr
- *On the Efficient Estimation of Parameters of Stochastic Models using Accelerators*, by E. Atanassov, M. Durchova, D. Dimitrov, S. Ivanovska

The seminar took place after those lectures, which pivoted around applied Monte Carlo simulation and modeling methods used in the semiconductor and silicon diodes industries. Prof. Maire's talk, while focusing strongly on the theoretical side on Monte Carlo calculations, provided the attendees with information how his method could be successfully used for creating non-evasive breast cancer search and how the technology used by the previous talks could be applied in the medical industry.

More than 20 participants were in attendance – not only researchers and University lecturers, but also industry representatives, and several PhD students as well. The audience came from countries like Austria, Belgium, Bulgaria, France, German Switzerland, UK ect.