

Tamás Máray: Do we need traditional supercomputers in the future?

### Abstract

Such a question raises sometimes: do we really need special architecture, expensive supercomputers for satisfying the needs of demanding scientific computations, or the fast evolving commercial computers (x86 based PC) – that seem a cheaper solution – can easily solve all the problems today? One can notice that the supercomputer manufacturing industry develops very fast and the Intel systems could not replace the other architecture processors yet. The presentation would like to highlight some of the theoretical and technical/technological challenges, which prevent to use other HPC solutions than traditional supercomputers in many fields of applications today.