

## Opening statement from Program Chair

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One of the useful bifurcations in computer science is into the logical and the physical. In the early days of electronic computers we had to find ways of matching the logical to the physical. Assembly language was designed to have a one-to-one correspondence to machine language and is still dependent on the hardware architecture. With compilers and interpreters we developed higher languages that were independent of the computer hardware architecture.

We are now at a new level of independence. This time we are defining logical networks that are independent of the network hardware infrastructures. These logical networks can be regarded as virtual structures that ride on hardware networks. It is in the design of their protocols that we have achieved this larger scale mode of independence. It is also in these protocols that we find a convergence of their various modes of virtuality.

It is likely safe to say that all Peer-to-Peer architectures are Grids. However, there are Grids which we would not regard as Peer-to-Peer. It is also likely safe to say that all Peer-to-Peer architectures designed for computing (sharing CPU cycles) are Clusters. However, it is not the case that all Clusters are Peer-to-Peer. These are some of the issues that we can address to our panel today.

For the most part these virtual architectures concern the use of the leaf nodes in hardware networks. This has led to a convergence of protocols. It is in recognition of this convergence that we have widened the scope of our conference.

Welcome to all and let's begin.

Prof. Nahid Shahmehri, Director of IISLAB and our Conference Steering Committee Chairperson, will chair this morning session.