An Introduction to Parallel Computing Message Passing Interface & Application

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An overview of parallel computing, the Message Passing Interface (MPI) and its applications, is provided in a three-part seminar to introduce the relative simplicity of obtaining the maximum benefit from parallel computing and in particular on networks of workstations. Part 1 explores the architectures, models and environments concerning parallel computation and may allow researchers to identify the possibility for parallelism in their own work. Part 2 provides an in-depth look at MPI centred on a practical perspective of installation, building and running code, and the usage of supporting tools for debugging and graphical display. Part 3 concerns applications for MPI and includes code excerpts, in a "show & tell" approach.