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	Basics	Algorithms	MPI
2005-10-28	<ul style="list-style-type: none"> - Supercomputer Classification - SPMD 		<ul style="list-style-type: none"> - MPI implementations - HowTo run a MPI program - MPI header / trailer - MPI syntax convention (MPI_ prefix)
2005-11-04		<ul style="list-style-type: none"> - Numerical Integration (trapezoidal rule) 	<ul style="list-style-type: none"> - Static process model - MPI data types (predefined)
2005-11-11	<ul style="list-style-type: none"> - BLAS level - MISD example - Blocking vs non-blocking - Asynchronous, synchronized, buffered, ready mode 	<ul style="list-style-type: none"> - Vector-Vector operations 	<ul style="list-style-type: none"> - Buffer concept (no messages lost, no overtaking) - Variants of P2P operations
2005-11-18	<ul style="list-style-type: none"> - Speed-up / efficiency - Ware's law vs. Gustafson's law - Collective operations 	<ul style="list-style-type: none"> - Matrix-Matrix operations - Cannon's algorithm (blockwise multiplication) 	<ul style="list-style-type: none"> - Variants of collective operations - Reduction types
2005-11-25	<ul style="list-style-type: none"> - Dependency graphs for function evaluation - Gauß elimination (LU decomposition) 	<ul style="list-style-type: none"> - Parallel Gauß elimination using cyclic column assignment 	<ul style="list-style-type: none"> - MPI communicators - Topology concept
2005-12-02	<ul style="list-style-type: none"> - How to decline situs, -us 	<ul style="list-style-type: none"> - Partitioning method for tridiagonal systems - Cyclic reduction (Hockney / Golub) 	<ul style="list-style-type: none"> - MPI message tagging
2005-12-09		<ul style="list-style-type: none"> - CSC - Jagged Diagonal Format - Converting CSC into CSR 	

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2005-12-16	<ul style="list-style-type: none"> - Relaxation schemes - Matrix formulation - Formulas - Residual formulation - Data dependency graphs - Explicit stiffness matrix assembly vs. implicit solving algorithms 	<ul style="list-style-type: none"> - Parallel GS using cyclic column assignment - Domain Decomposition using element-wise evaluation only 	
2005-01-13	<ul style="list-style-type: none"> - Matrix formulation of parallel iteration schemes - Level of parallelisation - Domain Decomposition variants 	<ul style="list-style-type: none"> - Domain Decomposition on the linear equation system 	