Kompaktkurs Iterative Gleichungssystemlöser und Parallelisierung

	Montag	Dienstag	Mittwoch	Donnerstag	Freitag	
08:30 – 08:45	**08:30 – 09:00 Registration [Foyer]**	08.30-09.40 Rabenseifner: Parallel Architectures and Programming Models HLRS, Seminarraum	08.30 – 09.00 Rabenseifner: Access to computing-centers, HLRS, Seminarraum	08.30 – 09.30 Fischer: Polynomiale Verfahren (CG, CR, Lanczos) HLRS, Seminarraum	08.30-09.30 Meister: Die Prinzipien des Mehrgitterverfahrens	08:30 – 08:45
08:45 – 09:00						08:45 – 09:00
09:00 – 09:15	**09:00 – 09:15 Eröffnung: IMS, Seminarraum**		09.00-10.10 Rabenseifner: Virtual Topologies HLRS, Seminarraum		09.45-10.15 Küster: Parallelization of Iterative Solvers	09:00 – 09:15
09:15 – 09:30	09.15 – 10.15 Meister: Klassische Splitting-Methoden I IMS, Seminarraum					09:15 – 09:30
09:30 – 09:45				**09.30 – 09.45 Pause**	**09.30 – 09.45 Pause**	09:30 – 09:45
09:45 – 10:00		**09.40-09.55 Pause**		09.45 – 10.45 Fischer: Indefinite Probleme (SYMMLQ, MINRES) HLRS, Seminarraum	9:45-12-15 Rabenseifner: Laplace-Example with MPI and PETSc (a) Introduction (b) Writing a parallel MPI program with a CG solver HLRS, Seminarraum	09:45 – 10:00
10:00 – 10:15		09.55-11.30 Rabenseifner: MPI Overview and Process Model HLRS, Seminarraum	**10.10 – 10.25 Pause**			10:00 – 10:15
10:15 – 10:30	**10.15 – 10.30 Pause**		10.25-11.00 Rabenseifner: Collective Communication HLRS, Seminarraum			10:15 – 10:30
10:30 – 10:45	10.30 – 11.30 Meister: Klassische Splitting-Methoden II IMS, Seminarraum					10:30 – 10:45
10:45 – 11.00				**10.45 – 11.00 Pause**		10:45 – 11.00
11:00 – 11:15			**11.00 – 11.15 Pause**	11.00 – 12.00 Fischer: Nichtsymmetrische Probleme: Minimierende Verfahren (GMRES) HLRS, Seminarraum		11:00 – 11:15
11:15 – 11:30			11.15-12.00 Rabenseifner: Other MPI-1 features and Heat Conduction program HLRS, Seminarraum			11:15 – 11:30
11:30 – 11:45	**11.30 – 11.45 Pause**	**11.30 – 12.30 Mittagspause**				11:30 – 11:45
11:45 – 12.00	11.45 – 12.45 Meister: CG-Verfahren IMS, Seminarraum					11:45 – 12.00
12:00 – 12:15			**12.00 – 13.00 Mittagspause**	**12.00 – 13.00 Mittagspause**	**12.00 – 13.00 Mittagspause**	12:00 – 12:15
12:15 – 12:30						12:15 – 12:30
12:30 – 12:45		12.30-13.45 Rabenseifner: Messages and Point-to-Point Communication HLRS, Seminarraum				12:30 – 12:45
12:45 – 13:00	**12.45 – 14.00 Mittagspause**					12:45 – 13:00
13:00 – 13:15			13.00-14.00 Müller: OpenMP – Overview and execution model HLRS, Seminarraum	13.00 – 14.00 Fischer: Nichtsymmetrische Probleme: Kurze Rekursionen (BCG, CGS, BiCGStab, QMR) HLRS, Seminarraum	13.00-14.00 Rabenseifner: PETSc Tutorial HLRS, Seminarraum	13:00 – 13:15
13:15 – 13:30						13:15 – 13:30
13:30 – 13:45						13:30 – 13:45
13:45 –		**13.45 – 14.00 Pause**				13:45 – 14:00
14:00 – 14:15	14.00 – 15.00 Meister: Präkonditionierungstechniken und PCG-Verfahren IMS, Seminarraum	14.00-15.15 Adamidis: Non-Blocking Communication HLRS, Seminarraum	**14.00 – 14.15 Pause**	**14.00 – 14.15 Pause**	**14.00 – 14.15 Pause**	14:00 – 14:15
14:15 – 14:30			14.15-15.15 Müller: OpenMP – Work sharing directives HLRS, Seminarraum	**ab 14.15 Übungen HLRS, Seminarraum**	14.15-15.00 Rabenseifner: (c) Laplace-Example with PETSc HLRS, Seminarraum	14:15 – 14:30
14:30 – 14:45						14:30 – 14:45
14:45 – 15:00						14:45 – 15:00
15.00 – 15.15	**15.00 – 15.15 Pause**				15.00-15.30 Küster: Parallel libraries Rabenseifner: Summary and Q&A HLRS, Seminarraum	15.00 – 15.15
15:15 – 15:30	**ab 15.15 Übungen HLRS, Seminarraum**	**15.15 – 15.30 Pause**	15.15-16.00 Keller: OpenMP – Data environment, HLRS, Seminarraum			15:15 – 15.30
15:30 – 15:45		15.30-16.30 Rabenseifner: Derived Datatypes HLRS, Seminarraum				15:30 – 15:45
15:45 – 16:00			**16.00 – 16.15 Pause**			15:45 – 16:00
16:00 – 16:15			16.15-17.15 Keller: OpenMP – Pitfalls, Assure HLRS, Seminarraum			16:00 – 16:15
16:15 – 16:30						16:15 – 16:30
16:30 – 16:45		16.30-17:15 Parallel debugging HLRS, Seminarraum				16:30 – 16:45
16:45 – 17:00						16:45 – 17:00
17:00 – 17:15						17:00 – 17.15