







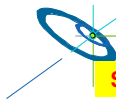


## 5-Day-PATC-Course — *Beginners* — 1st day (Monday)

### Message Passing Interface (MPI-1, part 1)

- 8:30 **Registration**  
9:00 **Introduction** [1] (talk)   
9:10 **Parallel Architectures and Programming Models** [2] (talk)   
10:30 **Coffee**  
10:45 **MPI-1 – Introduction to the Message Passing Interface** [3+3a] (talk)   
10:45 **Chap. 1 MPI Overview** (talk)   
11:15 **Chap. 2 MPI Process model** (talk+practical)   
12:30 **Lunch**  
13:30 **Chap. 3 Messages and Point-to-Point Communication** (talk+practical)   
14:45 **Coffee**  
15:00 **Chap. 4 Non-Blocking Communication** (talk+practical)   
16:15 **Coffee**  
16:30 **Chap. 5 Derived Datatypes** (talk+practical)   
18:00 **End**




















Introduction Rolf Rabenseifner  
[1] Slide 9 (5 days) Höchstleistungsrechenzentrum Stuttgart

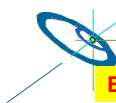
H L R I S 

**Stuttgart-City-Tour and Social Event (Restaurant to be announced, self paying)**

## 5-Day-PATC-Course — *Beginners* — 2nd day (Tuesday)

### Message Passing Interface (MPI-1, part 2, and MPI-2 for beginners)

- 8:30 **Access to the federal high-performance computing-centers** [9] (talk)   
9:00 **Chap. 6 Virtual Topologies** [3, continued] (talk+practical)   
10:10 **Coffee**  
10:25 **Chap. 7 Collective Communication** (talk+practical)   
11:00 **Coffee**  
11:15 **Chap. 8 Other MPI-1 features** (talk)   
12:00 **Heat conduction program, a parallelization example with MPI** [6] (talk)   
12:30 **Lunch**  
13:30 **Domain decomposition of structured and unstructured grids** [31] (talk)   
14:30 **Coffee**  
14:45 **Load balancing** [32+32a] (talk) German:   English:    
15:15 **MPI-2 overview** [10] (talk)     
15:45 **Coffee**  
16:00 **MPI-2 one-sided Communication** [12+12a] (talk+practical)   
17:15 **Parallel debugging** [5] (talk+practical)     
18:00 **End**



Introduction Rolf Rabenseifner  
[1] Slide 10 (5d) Höchstleistungsrechenzentrum Stuttgart

H L R I S 

**Excursion to the world's 1st TV tower / States Gallery – Exhibition of Modern Art**