

## Parallel and Distributed Programming

### Laboratory 6

#### Steps:

1. Create a working directory (eg. lab6).
2. Write a program that for a given number, propagates it to all nodes (MPI\_Bcast). Each process has to print out its ID and the value of the received number. The values should be read-out until the entered value is not negative.
3. On the basis of the [sample program](#) familiarize yourself with the creation of new data types in MPI and modify provided code for sending self-designed data structure consisting of at least five elements. Measure the time of sending the data.
4. On the basis of the [sample program](#) modify the previous program and send your structure with MPI\_PACK data type. Measure the time of sending the data and compare with a previous results.