Parallel Visualization
of Scientific Data using Blender
(PRACE Training Course)

September 24, 2020
VSB - Technical University of Ostrava
IT4Innovations

Lecturers: Petr Strakoš, Milan Jaroš, Alena Ješko *- IT4Innovations*

The course will focus on **visualization of scientific data** that can come from simulations of different physical phenomena (e.g. fluid dynamics, structural analysis, etc.). To create visually pleasing outputs of such data a **path tracing rendering method** will be used. All of the course aspects will be covered within the popular **3D creation suite Blender**. We will work with the 2.8 version and introduce two of our plug-ins we have developed. The first one, called **Covise Nodes** is used to extend Blender capabilities to process scientific data. The second add-on is called **Bheappe** and it integrates cluster rendering in Blender. Within the course we will demonstrate some of the basics of Blender, followed by a data visualization example, and we will finish the course with rendering of a created scene on a supercomputing cluster.

Thursday September 24, 2020

09:30 - 10:00	Registration/Presentation
10:00 - 10:30	Introduction
10:30 - 12:00	Blender basics; Hands-on
12:00 - 13:00	Lunch
13:00 - 14:30	Using Covise Nodes to work with scientific data; Hands-on
14:30 - 15:00	Coffee break
15:00 - 16:00	Rendering of created scene on an HPC cluster; Hands-On
16:00 - 16:30	Q&A

NOTE: The organization of the course will be adapted to the current COVID-19 regulations and participants must comply with them. In case of the forced reduction of the number of participants, earlier registrations will be given priority.

MINISTRY OF EDUCATION, YOUTH AND SPORTS

More information & registration:
events.it4i.cz/event/47/