

# Parallel Visualization of Scientific Data using Blender

(PRACE Training Course)

**April 30, 2020**

**VSB - Technical University of Ostrava  
IT4Innovations**

**Lecturers:** Petr Strakos, Milan jaros, Alena Jesko - 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 30<sup>th</sup> April 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



More information & registration:  
[events.it4i.cz/event/47/](https://events.it4i.cz/event/47/)



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