

Assignment 3: Critical Review

Seminar

"Last advances of the PFEM for coupled problems"

This critical review is a critique of the last seminar of the course, "Last advances of the PFEM for coupled problems" by Professor Alessandro Franci. The seminar took place on Wednesday 4th of December at the CIMNE in the North Campus of University Politècnica de Catalunya, Spain. The aim of the seminar was to present the latest developments of the Particle Element Method (PFEM) implemented in the Kratos Multiphysics software. The talk was divided into three parts. Firstly, the professor gave an introduction to the fundamentals of the PFEM theory. Secondly, he analysed this method for natural hazard simulation, with nodal integration for free-surface fluid dynamics and FSI problems and finally, PFEM-DEM coupled formulation for particle-laden flow simulation was explained. Lastly, he presented ongoing and future research lines.

During the seminar, Franci delivered his talk in an adequate way. He started by introducing himself and then went on to the topic giving a fluid structure to the presentation. At the end of the presentation, he answered the questions clearly and with confidence which showed his excellent knowledge in his field as expected.

Although he spoke loudly and clearly enough and was therefore easy to understand, his tone was slightly monotonous. He also lacked a more dynamic contact with his audience instead of using body language to engage them.

Another aspect to comment is the length of the talk which was fixed by the time slot and limited for this extensive topic. The professor took more time than assigned which in turn, made the seminar too long which provoked the distraction of the audience at the end.

Regarding the exposition of the subject, it was a really captivating topic. His explanations were intelligent with good slides to support them which were uniformly distributed per sections. The listeners could understand clearly the method and its applications. He gave real examples of natural hazard simulations such as the Italian one which the public could empathise with.

In conclusion, the presentation was well delivered. The oral delivery of the presenter was clear, without mistakes that could deviate attention, and at a pace that was appropriate for the kind of lecture that he was giving. The questions were about suggestions and future developments and none about clarifications of the talk which highlights the high-quality and well-explained presentation.