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Critical Review for "Modeling of Machining by PFEM"

A seminar under the title "Modeling of Machining by PFEM" was held by Josep Maria Carbonell I Puigbo on the 20th of November 2019. He started introducing machining, and then tackled this topic in a numerical methods point of view to solve them. He stated the problems that his team went through in 2D and 3D analysis of the problem, and stating the different applied methods and showing the result for each method. At the end he states the reasons for preferring the particle finite element method (PFEM) over the other methods.

Starting with the audience, most of the people are related to the topic. Some people already have some background knowledge of machining, numerical methods, or PFEM. Some of the people come from the first semester of masters in numerical methods or from Erasmus therefore they lack background knowledge about the topics mentioned before. Although there are many types of people in the audience, the explanation about the topic was so clear that everyone in the room understood the topic because of the simplicity and clarity of the presentation.

The presentation had few texts that were explained clearly, and many animations and figures that show the results for all the methods. Some of the texts were too small for the people in the back to read them, and most probably it distracted them. Therefore, it is better to make these texts bigger and add some slides to keep the same amount of information and make it clear to all the viewers. There was at least one equation for each method that were written in the presentation to clarify the ideas. These equations made things a bit more complicated for the audience, and some people were focusing on reading the letters on the board. His explanation on the other hand made the general idea behind each equation clearer to the audience.

His presence during the presentation plays the main role in keeping everyone's attention. He wasn't keeping his eye contact with the audience, because he had a lot of equations and results to show, but that didn't let us get distracted. Although he was looking at the presentation too often, he was guiding the presentation. He was confident about the topic and was speaking fluently and he didn't hesitate about any information he gave to the audience. This made them trust what he was presenting, so they were paying attention to the topic. On the other hand, while presenting his voice was clear, and he had good articulation while English is not his native language so everyone understood the words he was saying.

Overall, the presentation was good and very clear for any type of audience. He guided us through the equations, pictures and small videos and made everything clear to everyone, while enriching us with his explanation and knowledge about the topic. It was an interesting topic and the presenter made it even more interesting for others.