

Critical review on Mariano Vázquez's seminar:

Last November, Mariano Vázquez, a researcher of the Barcelona Supercomputing Center, gave a seminar called 'Fully coupled fluid-electro-mechanical cardiovascular simulations'.

On the one hand, the exposition of ideas was widely supported by the projection of useful images and videos. Given that the topic was completely new to most of us, showing examples of the simulations results proved to be really helpful in order to understand it. For instance, the propagation of the electric impulse through the muscular walls of the heart was used to see where pacemakers have to be inserted after tissue death. After the talk, one could get a fine impression on what the main point on cardiovascular modelling have to be considered, and also some problems that can be found when dealing with coupling physical systems (they actually decided not to couple the fluid, electro and mechanical systems all together, but in two separate steps).

On the other hand, relying on having such a well powerpoint had a counter effect, as Mariano sat for most of the time and made little use of the blackboard behind him, so if somebody had doubts about a topic that was not properly explained in the slides, they could not be properly cleared.

Also, the first part of the seminar was devoted to talking about the Barcelona Supercomputing Center, the software that they are developing and their different research groups, giving the impression of being in a marketing campaign.

In general, it was a very interesting seminar, although a little bit long. It satisfied what I expected from it and gave some hints on the researcher's life.