

Group Meeting #6

Date: Tuesday 22-10-2019. (8:00 to 9:30 AM)

Location: Chair of Computational Mechanics (Room: N2620)

In attendance: Ani Khaloian, Michael Richter (Project supervisors)

Ammar Khallouf, Gavallas Panagiotis, Yasuyuki Shimizu (Group members)

1. Discussion of work progress:

-The group members presented for 15 minutes each the progress made on the project during the semester break.

- Mr. Panagiotis presented his proposed code for the implementation of the Puck's failure criterion. He explained the numerical convergence difficulties encountered during the ABAQUS simulation and discussed with supervisors some possible solutions for this problem. The supervisors suggested to use the element deletion feature within ABAQUS to mitigate this issue.

-Mr. Shimizu presented his proposed code for the implementation of Hoffman failure criterion. He mentioned that he was not able to execute the code in ABAQUS due to compilation errors, the group discussed the possibility of software incompatibility problem. It was suggested to review the code syntax again and test it on the PC in BGCE room.

-Mr. Khallouf presented his proposed code for two (continuum damage mechanics) models, namely: (Hashin-Rotem) Matzenmiller model and crack band theory model. He presented some benchmark problems from NASA and WWFE to be used for validating the code.

2. Discussing the future steps for final presentation review:

-The group members inquired about the format for the overall documentation of the project.

-The supervisors requested to submit the updated set of codes and ABAQUS models next week for review before the next meeting.

-The group members agreed to start preparing the documentation for the project and the final presentation slides.

4. Next Meeting:

-The next meeting with the supervisors will be held on Tuesday, November, 5th at 8.00 AM (Room N2620).