MATLAB Electric fields

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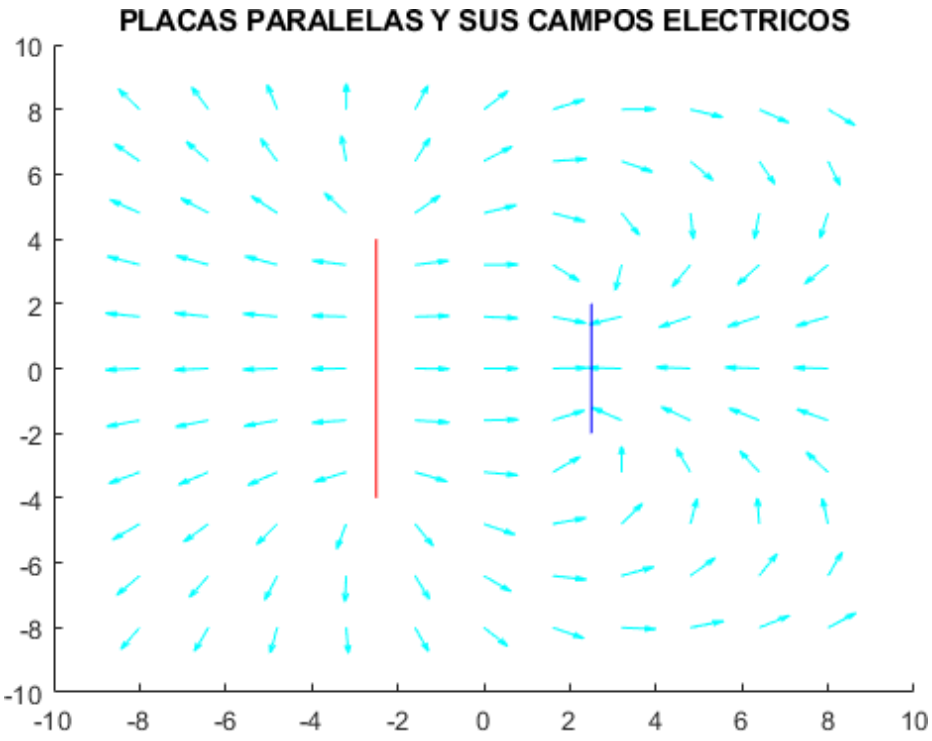
Here we can see the graph that represents the simulation of plates with their electric fields, one of them is positive, so it is repelling the vectors and the other is negative, so it is attracting them.



The electromagnetism project was made with another team.

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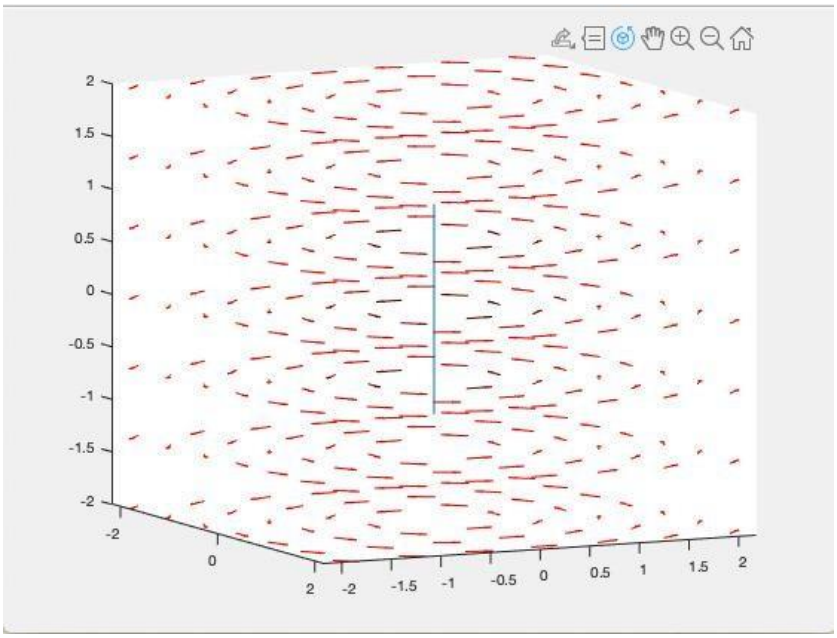
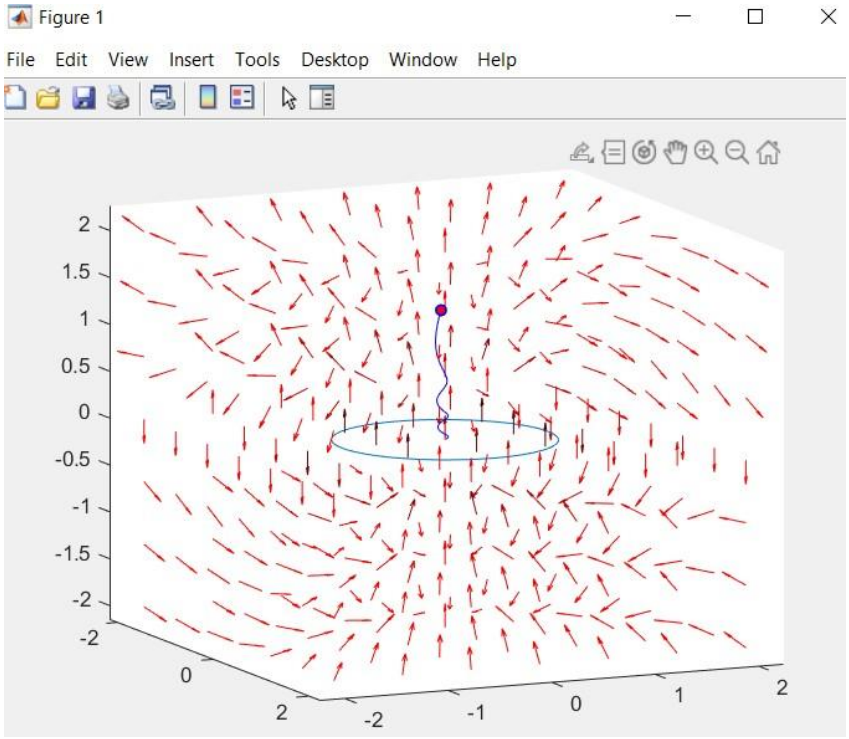
Each figure has its own parameters that were established in the code, but I must mention that running a test took many minutes and computing resources. Secondly, the variable delta was critical in determining the particle trajectory scope, so we spent a lot of time with trial and error to get its value, so we can have the best way possible to watch the simulation, which was a real time demo because the graph used an animation.

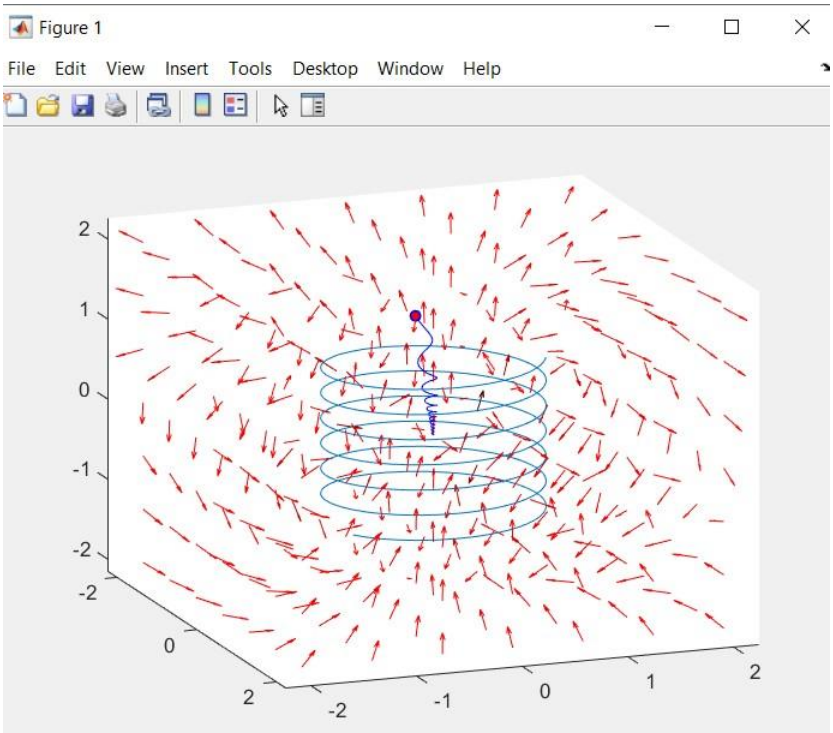
In the first case of the electric current line, we didn’t get the appropriate delta because of the date of delivery of the project, so we can only see the electromagnetic field.



The second figure is a ring.



The third figure is a solenoid.



The last figure is a spherical solenoid, which used the earth data as parameters.