

## Industrial Workshop IW06

### Multiphysic Analysis for 5G Devices (by Ansys)



#### Abstract:

- A smart world needs inter-connected devices, and, in this case, more interaction means more antennas. Integration process has to consider thermal and structural issue that could occur compromising antenna performances. In this presentation it will be investigated how simple it is to handle 5G shark antenna design simulating bidirectional EM and thermal behavior with ANSYS tools. Thanks to the multiphysic simulation approach, antenna engineers can follow each project phase: from the design to the installation.

#### Workshop Program (Tuesday, 23 March 2021, 13.20-13.35h)

In this presentation an overview of 5G challenges will be provided and how it is possible to address them in the correct way using simulation. In this journey it will be shown how an implementation choice that seems to be correct from an electromagnetic standpoint sometimes could not be as good from a thermal point of view. Engineers need a powerful and reliable simulator that is able to analyze all issues that can arise and to consider all multiphysics aspects during each design step.

