

2021 TJPhO Solutions

Name(s)

Team Email

Team Number

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1 Background Problems

Electric and Magnetic Fields

1 If you wish, you can copy the question text here (and in subsequent problems).

Solution.

- a) Write your solutions inside these kinds of environments.
- b) Use the enumerate environment for multi-part problems

Conductors

2

Circuits

3

Diamagnetism

4

Magnetic Dipoles

5

Meissner Effect

6

2 Applied Problems

Cooling Superconductors

7

Magnetic Resonance Imaging (MRI) Machines

8

Superconducting Qubits

9

Particle Accelerators

10

3 BCS Theory

Quantum Statistics

11

Cooper Pairs

12
