

# Summer School on Quantum Information Processing - Gate-based and Annealing Systems

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## **QUBO Formulation and QAOA: A tutorial on encoding and solving combinatorial optimization problems - part I**

*Tuesday, 29 August 2023 09:00 (1 hour)*

In this tutorial, we will dive into combinatorial optimization problems and explore how effectively encode these problems using the Quadratic Unconstrained Binary Optimization (QUBO) formulation and how to tackle them using the Quantum Approximate Optimization Algorithm (QAOA).

**Presenter:** Dr MONTANEZ, Alejandro