

## **A Golden Age in Physics: nuclear collisions at ultra-relativistic energies (Block 3)**

*Tuesday, 29 June 2021 12:00 (1h 15m)*

**Abstract:** I give a pedagogical introduction to gauge theories, and how they appear in the theory of strong interactions, where quarks and gluons form neutrons, protons, and other particles. I make several historical detours, to emphasize how the lore of “As everyone who is anyone knows...” has failed in physics. A brief overview of results from the Relativistic Heavy Ion Collider will be outlined, but the emphasis is on why a Quark-Gluon Plasma, created at about a trillion degrees, is a subject of fundamental interest.

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