

# Quark-gluon plasma and the physics of light ion collisions at the Large Hadron Collider

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In 2010 the Large Hadron Collider collided for the first time lead ions with a Lorentz gamma factor exceeding 1000. Such ultrarelativistic collisions create a quark-gluon plasma with an extremely high temperature. I will explain the basic physics of such collisions and then showcase very new results of similar collisions of oxygen and neon that were just performed last summer. Oxygen and neon nuclei are much smaller than lead and can therefore provide us answers to pressing questions on the tiniest droplets of quark-gluon plasma that we can currently imagine. It also allows us to study how these light nuclei are shaped in a way that was never possible before.

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