FZU Institute of Physics of the Czech Academy of Sciences

Invitation

to the seminar of Division of Elementary Particle Physics of the Institute of Physics of the Czech Academy of Sciences

Dr. Roman Lysák

Institute of Physics of the Czech Academy of Sciences

Quantum entanglement in top-quark pair production

Abstract: The quantum entanglement is one of the most characteristic features of quantum mechanics. It was observed in multiple systems, typically at low energies. In recent years, there have been proposals to study this phenomenon at the high energy particle colliders. In this talk, I report on the observation of quantum entanglement in top-quark pair production within the ATLAS experiment at the Large Hadron Collider at CERN. This potentially opens up a new avenue for quantum information measurements at the colliders, for example, the measurement of Bell inequality violation.

When: Thursday, February 1, 2024 at 2PM
Where: Main conference hall, Institute of Physics, Na Slovance 2, Prague 8

For more information, please see https://indico.fzu.cz/event/221/

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