# 9th International Conference on New Frontiers in Physics (ICNFP 2020)



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# On duality between quantum statistical and field-theoretic approaches

Friday, 11 September 2020 11:30 (30 minutes)

Motivated by the phenomenology of the heavy-ion collisions, we consider various processes in rotating and accelerated chiral media in equilibrium. There are two dual approaches to address the issues: field theory on a curved background and statistical approach in flat space, with the density operator taking on the most general form. On a few examples, we demonstrate the duality in case of quantum particles of spins s = 0, 1/2, 1. In case of higher spins we encounter difficulties which seem to suggest breaking of the duality. Some phenomenological consequences are indicated.

## Is this abstract from experiment?

No

#### Internet talk

Yes

## Name of experiment and experimental site

N/A

# Is the speaker for that presentation defined?

No

#### Details

N/A

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