42nd International Symposium on Physics in Collision



Contribution ID: 39

Type: Oral presentation

Boundary effects in the parity-breaking hadronic medium

Thursday 12 October 2023 12:10 (25 minutes)

It was argued that local parity breaking may emerge in hot dense hadronic medium. We investigate the possibility of formation of photon and vector meson states localized in the transition region between domains with different axial chemical potential values. Using the vector meson dominance model modified to take into account parity-breaking backgrounds we obtain the spectrum of such states and study their evolution. We also investigate the impact of such boundaries on the exotic processes in the parity-breaking medium that were predicted in the preceding work.

Is this abstract from experiment?

No

Name of experiment and experimental site

N/A

Is the speaker for that presentation defined?

Yes

Details

Oleg Novikov, Saint-Petersburg State University, Russia, http://hep.spbu.ru/index.php/en/50-oleg-olegovich-novikov

Internet talk

Yes

Primary author: Dr NOVIKOV, Oleg (Saint-Petersburg State University, V.A.Fock Department of Theoretical Physics)

Co-authors: Dr ZAKHAROVA, Anna (Saint Petersburg State University); Dr KOVALENKO, Vladimir (St Petersburg State University (RU))

Presenter: Dr NOVIKOV, Oleg (Saint-Petersburg State University, V.A.Fock Department of Theoretical Physics)

Session Classification: Parallel Session 2

Track Classification: Heavy Ion Collisions