Contribution ID: **7** Type: **Invited**

Vector resonances as a probe of spin hydrodynamics

Monday, 6 November 2023 17:20 (25 minutes)

We show that vector and higher spin resonances are a sensitive probe of a fundamental aspect of spin hydrodynamics - the lack of equilibrium between spin and vorticity. This is because the purity structure of the density matrix is measurable via the off-diagonal density matrix elements.
We illustrate this via coalescence models for light mesons and potential models for quarkonium states, and illustrate further directions for both theory and experimental analysis.

Based on
https://arxiv.org/abs/2305.02985
and
https://arxiv.org/abs/2104.12941

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