## Quark Matter 2023



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## Topology and entanglement in the baryon structure at small x.

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The question of identifying the baryon topological structure encoded in the baryon junctions has a long history and was recently addressed in the measurements of baryon stopping by the STAR collaboration. We suggest considering this question in a simple, exactly solvable model that allows us to clearly separate the topological junction structure from the valence quarks. We find that baryon number distribution peaks at small x indicating the major role of topology. Furthermore, our model allows us to study the entanglement between valence quarks enabled by the junction and reveal the connection between topology and entanglement in the baryon structure.

## Category

Theory

## **Collaboration (if applicable)**

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