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## Pion Gravitational Form Factors in Holographic QCD

Thursday 29 August 2024 11:40 (20 minutes)

We calculated the gravitational form factors (GFFs) of pions,  $A(t)$  and  $D(t)$ , using a top-down holographic QCD approach with momentum transfer dependence [1]. The GFFs of hadrons have attracted attention because they contain information on the internal stress distribution, which may provide insights into the mechanisms of hadron formation by QCD. Our results show that the absolute values of  $D(t)$  drops more rapidly than that of  $A(t)$ , which are qualitatively consistent with the results of lattice QCD. Furthermore, we obtained the forward limit value of these GFFs, specifically the D-term, which is -1.

[1] D. Fujii, A. Iwanaka, and M. Tanaka, arXiv:2407.21113 [hep-ph] (2024).

### Internet talk

Yes

### Is this an abstract from experimental collaboration?

No

### Name of experiment and experimental site

N/A

### Is the speaker for that presentation defined?

No

### Details

N/A

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