

Contribution ID: 547

Canadian Association of Physicists

Association canadienne des physiciens et physiciens

Type: Invited Speaker / Conférencier(ère) invité(e)

## (I) A universal holographic wavefunction for light hadrons

Thursday 10 June 2021 11:45 (25 minutes)

I summarize recent work pointing towards the existence of a universal holographic light-front wavefunction for light mesons and nucleons. This holographic wavefunction, which describes simultaneously a bound state in light-front QCD and the propagation of string modes in a dilaton-modified 5-dimensional anti de Sitter spacetime, is a specific realization of the gauge-gravity duality. The modification of the holographic wavefunction by the spin structures specific to mesons and nucleons, leads to a remarkable simultaneous description of EM transition form factors of light mesons as well as the Dirac and Pauli form factors of nucleons.

Primary author: Prof. SANDAPEN, Ruben (Acadia University)
Presenter: Prof. SANDAPEN, Ruben (Acadia University)
Session Classification: R1-5 Theory II (DNP) / Théorie II (DPN)

Track Classification: Nuclear Physics / Physique nucléaire (DNP-DPN)