

# Weyl Symmetry for Dark Matter and Dark Energy

*Friday 5 July 2019 08:45 (45 minutes)*

I will start by reviewing the mimetic formulation for irrotational fluid-like Dark Matter. It turned out that the latter can be described by a Weyl-invariant higher-derivative scalar-tensor theory beyond the Horndeski class of theories. Then I will proceed by discussing a novel vector extension of the mimetic construction. This novel vector-tensor theory provides a Weyl-invariant higher-derivative and generally covariant description for the unimodular gravity.

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**Session Classification:** Beyond V