



Contribution ID: 312

Type: **Invited plenary talk**

# Applications of the functional renormalisation group: From strongly correlated QCD to asymptotically safe quantum gravity

*Saturday, 4 August 2018 09:00 (30 minutes)*

In this talk I review some applications of the functional renormalisation group to infrared QCD and asymptotically safe quantum gravity (QG). It is shown that the universal nature of the FRG allows for a surprisingly similar formulation of these two physically very different theories. This allows us to discuss their physics in a rather similar fashion.

In QCD current applications concern the quantitative access to correlation functions at vanishing and finite density and temperature, while current applications in QG concentrate on the establishment of the asymptotically safe theory without and with matter content, as well as on phenomenological consequences of an asymptotically safe Standard Model.

The talk closes with a short discussion of the respective perspectives.

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**Session Classification:** Plenary