

Contribution ID: 165

Type: **Plenary Sessions (for INVITED PLENARY TALKS only!)**

## Nucleon Femtography from Exclusive Reactions

*Wednesday, 12 September 2018 09:00 (40 minutes)*

With the tantalizing search of the phase space available for supersymmetric particles turning out empty handed, we are on the verge of new profound paradigm changing discoveries where the strong interactions sector is once again taking on a leading role.

I will discuss deeply virtual exclusive processes as probes for the next frontier that will allow us to access dynamically correlated distributions in both momentum and coordinate space – the Wigner distributions – at the femtoscale. I will explain how a detailed phase space mapping of the quarks and gluons in both the nucleon and the atomic nucleus, besides providing for the first time images of quarks and gluons spatial distributions, is essential for understanding the so far elusive nucleon mass and spin decompositions in terms of its quark and gluon components.

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**Session Classification:** Plenary

**Track Classification:** 3D Structure of the Nucleon: GPDs and Form Factors