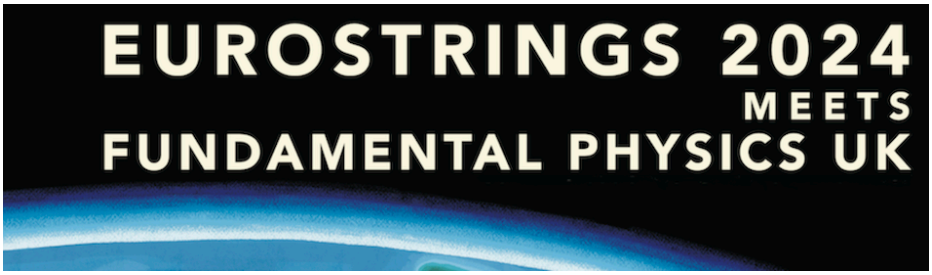

Contribution ID: **178** Type: **Plenary talk**

Asymptotics for subleading soft theorems at all orders

Thursday 5 September 2024 12:00 (30 minutes)

It is by now well understood how leading soft theorems follow as Ward identities of asymptotic symmetries defined at null infinity. For subleading infrared effects the connection is more subtle, but it turns out that this can be formalised, to all orders in the energy expansion, by adapting the Stuckelberg procedure to construct an extended radiative phase space at null infinity. I will exemplify this with Yang-Mills theory, showing the construction of the extended phase space, as well as the charges corresponding to the subleading soft theorems at all orders. These turn out to satisfy simple recursion relations, and organise themselves into infinite dimensional algebras in certain subsectors.

Link to publication (if applicable)

Presenter: NAGY, Silvia

Session Classification: Plenary session