

# On gauge and matter unification in composite Higgs models

*Wednesday 29 June 2022 09:00 (30 minutes)*

The gauge and matter structure of the SM hint at gauge and matter unification not far below the Planck scale. Preserving this in composite Higgs imposes restrictions on the embedding of the SM symmetry, and the standard composite-Higgs custodial symmetries, into the strong-sector symmetry group. I describe a minimal setup which, remarkably, automatically includes a vector leptoquark of the kind suggested by the flavour anomalies, and can be phenomenologically viable in the face of collider, electroweak and cosmological constraints. I will briefly remark on flavour, which as usual is more model-dependent.

**Author:** JAEGER, Sebastian

**Presenter:** JAEGER, Sebastian

**Session Classification:** Morning Session