For a multilayer system in the quantum Hall regime, when the distance between conducting layers is comparable to the distance between electrons within a layer, the Coulomb interaction between electrons in different layers can lead to new types of quantum Hall states. Recent experiments by groups from Harvard and Columbia on Coulomb-coupled graphene double layers have found new fractional quantized states and have shed new light on the previously studied interlayer-coherent integer quantized state. [1-3] I will review some of these experimental results as well as the theoretical picture behind them.

