Dima Arinkin:Â Moduli of regular connections on the punctured disk

Connections with regular singularities are natural and important objects. From a classical (that is, analytic) point of view, regular connections on the punctured disk are easily classified: their isomorphism classes are given by their monodromy. The situation becomes much more interesting for algebraic families of connections, because monodromy is not an algebraic function.

The goal of my talk is to study (and to define) the moduli `space' of connections with regular singularities on the punctured disk and to see the non-trivial algebraic counterparts of classical analytic statements.