1151-14-297 **Ivan Mirkovic***, 179 summer street, amherst, MA 01002. *Abelianization and loop Grassmannians.* Preliminary report.

The idea is that in algebraic geometry reductive groups should arise from graphs using distributions on curves. First, in the abelian case, i.e., the multiplicative group, the abelianization of a local of global smooth curve X (meaning the freely generated commutative group object in algebraic geometry) turns out to be the multiplicative distributions on X. [The semiabelianization (the freely generated commutative monoid) is the Hilbert scheme of points of the curve.] In the case of a general reductive G, the G-cohomology of a curve should be given by some"projective distributions" on the the cohomology of a Cartan. These are the ones that satisfy a property of "locality" from QFT or "factorization" (Beilinson-Drinfeld). (Received August 20, 2019)