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Torsors over the moduli of bundles

If M is the moduli space of bundles over a Riemann surface X, then we can define two torsors for T^*M: - the first is the moduli C of pairs (bundles, flat connections); -the second involves taking the determinant line bundle L over M, and considering on L, the bundle $Conn$ of connections (the thing of which a section would be a connection on L). Curiously the two (C and $Conn$) are equivalent as torsors, and even symplectomorphic. The identifications go by choosing a pair of canonical and seemingly unrelated sections over M; we do this in two ways. The identification seems to be fairly robust, as it is independent of which pair is chosen.

A similar picture holds over the bigger space of pairs (curve, bundle on that curve), that is, allowing the curve to move.

(joint work with Indranil Biswas, and Volodya Rubtsov)