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Flat bundles and Grassmann framings

When considering flat unitary bundles on a punctured Riemann surface, it is often convenient to have a space that includes all possible holonomies around the punctures; such a space is provided by the extended moduli space of Jeffreys. On the other hand, there are certain inconveniences, in particular no clear link to complex geometry via a Narasimhan-Seshadri type theorem. It turns out that the situation can be remedied quite nicely by considering bundles with framings taking values in a Grassmannian. Analogs for general structure groups, and in particular links with recent work of Martens and Thaddeus, will also be discussed. (joint work with U. Bhosle and I. Biswas)