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Classifying matrices with complex coefficients under conjugation leads to the Jordan canonical form. The same problem for pairs of matrices is unsolvable or wild, in the sense of Gel'fand-Ponomarev. I will explain the Gel'fand-Ponomarev construction and show that a local equivalence problem in Differential Geometry - that of classifying pairs of connections on a vector bundle is wild as well, as it contains the former. This is a joint work with Mikhail Shubin. (Received September 22, 2011)