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The universal unfolding is an atlas of Stokes data for the simple and the simple elliptic singularities

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A holomorphic vector bundle on \mathbb{C} with a meromorphic connection with an order 2 pole at 0 can be encoded by its monodromy data. In many cases from algebraic geometry, the pole part is semisimple with pairwise different eigenvalues u_1, \dots, u_n , and the monodromy data boil down to these eigenvalues and an upper triangular matrix with integer entries, a Stokes matrix. Isomonodromic deformations lead to a braid group orbit of Stokes matrices and base spaces, where the eigenvalues u_1, \dots, u_n are locally canonical coordinates. The talk discusses this for the simple and the simple elliptic singularities. Here distinguished bases of the Milnor lattice are marked monodromy data. For the simple singularities (Looijenga and Deligne 73/74) and the simple elliptic singularities (Hertling and Roucairol 07/18), this leads to an understanding of the base spaces of certain global versal unfoldings as atlases of marked monodromy data.

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