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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 $u_1, ..., u_n$, 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 $u_1, ..., u_n$ 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 atlasses of marked monodromy data.

Primary author: Prof. HERTLING, Claus (Universität Mannheim) Presenter: Prof. HERTLING, Claus (Universität Mannheim)