Spectrum of Singularities

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The spectrum is a strong invariant of a hypersurface singularity, defined originally by Arnold, Varchenko and Steenbrink. I will start with examples of singularities and their spectra and sketch the definition of the spectrum. Then I will concentrate on the most important properties of the spectrum such as the Thom-Sebastiani theorem and semicontinuity, which are very powerful in applications. Finally, I will talk about computational techniques to obtain the spectrum.