Effective nonoscillation of solutions of ODE's and infinitesimal Hilbert 16 problem

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A question about number of zeroes of Abelian integrals, commonly known as infinitesimal Hilbert 16 problem, can be considered as a particular case of a question about number of zeroes of solutions of Fuchsian systems of ordinary differential equations. A general theorem claims that the last number admits an effective upper estimate in terms of magnitude of coefficients if some necessary conditions are satisfied. This, in turn, is a consequence of a an effective upper estimate on the number of zeroes of solutions of systems of polynomial differential equations.

I'll discuss both these results and explain how one can try to apply them to the infinitesimal Hilbert 16 problem.