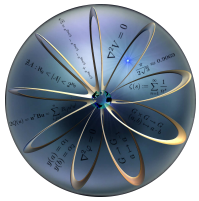

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hypergeometric equation

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The hypergeometric equation is the following linear ordinary differential equation:

$$x(1-x)y'' + (c - (a+b+1)x)y' - aby = 0$$

(Here, a, b, and c are complex constants.)

The solutions of this equation may be expressed in terms of the hypergeometric function, hence the name.

The hypergeometric equation is a Fuchsian differential equation with singularities at 0, 1, and ∞. By a suitable change of variables, any second order Fuchsian differential equation may be converted into a hypergeometric equation.