Dynamical systems solvable by algebraic operations

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In this talk I shall focus on systems of nonlinear Ordinary Differential Equations, and introduce the notion of their solvability by algebraic operations: implying that their general solution, considered as a function of complex time, feature at most a finite number of rational branch points, or equivalently define a Riemann surface with a finite number of sheets. Some properties of these systems shall be reviewed, including the subclasses of them featuring such remarkable properties as isochrony or asymptotic isochrony (as functions of real time). Techniques to identify such systems shall be reviewed, and several examples reported, including new classes of such systems.