

Hohenauer, W. Physical modelling based on first order ODEs. Notes. 22 pp.

[http://www.phox.at/upload/Physical%20modelling%20based%20on%20first%20order%20ODEs%20\(v1.3\).pdf](http://www.phox.at/upload/Physical%20modelling%20based%20on%20first%20order%20ODEs%20(v1.3).pdf) . Accessed 3 March 2018.

Abstract: An introduction in techniques to solve first order ODE's is given. Barometric formula, charging and discharging of a capacitor including its application for AMV, magnetic induction and growth effects are discussed. Physics of magnetic induction motivates to extend modelling capabilities in oscillation phenomena.

Keywords: model, differential equations, capacitor, induction, magnet, magnetic induction