Rectifiable oscillations in ordinary differential equations.
Part 3: generalizations to more abstract second-order differential equations

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Abstract. In this final part, we show a few ways how the basic results on the rectifiability oscillations near $x = 0$ of Euler type equation $y''+\lambda x^{-\alpha}y = 0$ can be generalized to more general class of second-order differential equations as follows: $y'' + f(x)y = 0$ where $f(x)$ satisfies the Hartman-Wintner type conditions (results by M. K. Kwong, M. Pašić and J. S. W. Wong - 2008), half-linear equation $(|y'|^{p-2}y')'+f(x)|y|^{p-2}y = 0$ (results by M. Pašić and J. S. W. Wong - 2009), self-adjont equation $(p(x)y')'+q(x)y = 0$ as well as damped equation $y''+g(x)y'+f(x)y = 0$ (results by M. Pašić and S. Tanaka - 2011), radial case for the Laplacian and p-Laplacian equations in $\Omega \subset \mathbb{R}^N$ (results in preparation by Y. Naito, M. Pašić and H. Usami) and two-dimensional differential systems with variable coefficients $\mathbf{x}'(t) = A(t)\mathbf{x}(t)$ where the notion of rectifiable oscillations is replaced by the rectifiable attractivity (results in preparation by PhD student S. Miličić and M. Pašić).