<https://en.wikipedia.org/wiki/Conjugate_gradient_method>

<https://www.sciencedirect.com/topics/engineering/conjugate-gradient-method>

<https://optimization.mccormick.northwestern.edu/index.php/Conjugate_gradient_methods>

The conjugate gradient method is a numerical method to iteratively solve a system of linear equations. It is particularly good at sparse systems, where other direct method would struggle. The Conjugate gradient method is much more efficient than other gradient-based methods, such as the steepest descent method. Unlike other iterative methods, the conjugate gradient method is guaranteed to converge after a finite amount of iterations. (Although due to machine precision, the method may take additional iterations to achieve a desired accuracy.