

## Some ideas to improve the domain of starting points for Newton's method

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We analyse the semilocal convergence of Newton's method under center conditions on the first Fréchet-derivative of the operator involved [2]. We see that we can extend the known results so far, since we provide different starting points from the point where the first Fréchet-derivative is centered (that is the situation usually considered by other authors [1, 2, 3]), so that the domain of starting points is enlarged for Newton's method. We illustrate the theoretical results obtained with some example.

### References

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