

DefElement

an encyclopedia of finite element definitions

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What is DefElement?

DefElement is an online encyclopedia of finite element definitions. You can view it at

e defelement.com

DefElement includes definitions of a huge range of finite elements including commonly used elements such as Lagrange, Raviart-Thomas [6], and Nédélec [4, 5]; and more exotic elements such as Argyris [1], Regge [7, 2], and TNT [3].

What information is on DefElement?

- Name(s) of the element
- Definition and properties of the element
- Implementations of the element -
- Example DOF diagrams and basis functions, with plots created using Symfem [8] —
- References

All the information and diagrams on DefElement are available for reuse under a Creative Commons CC BY 4.0 license: you can use them for free as long as you link to or cite DefElement. All the diagrams are available to download in PNG, SVG, and TikZ formats.

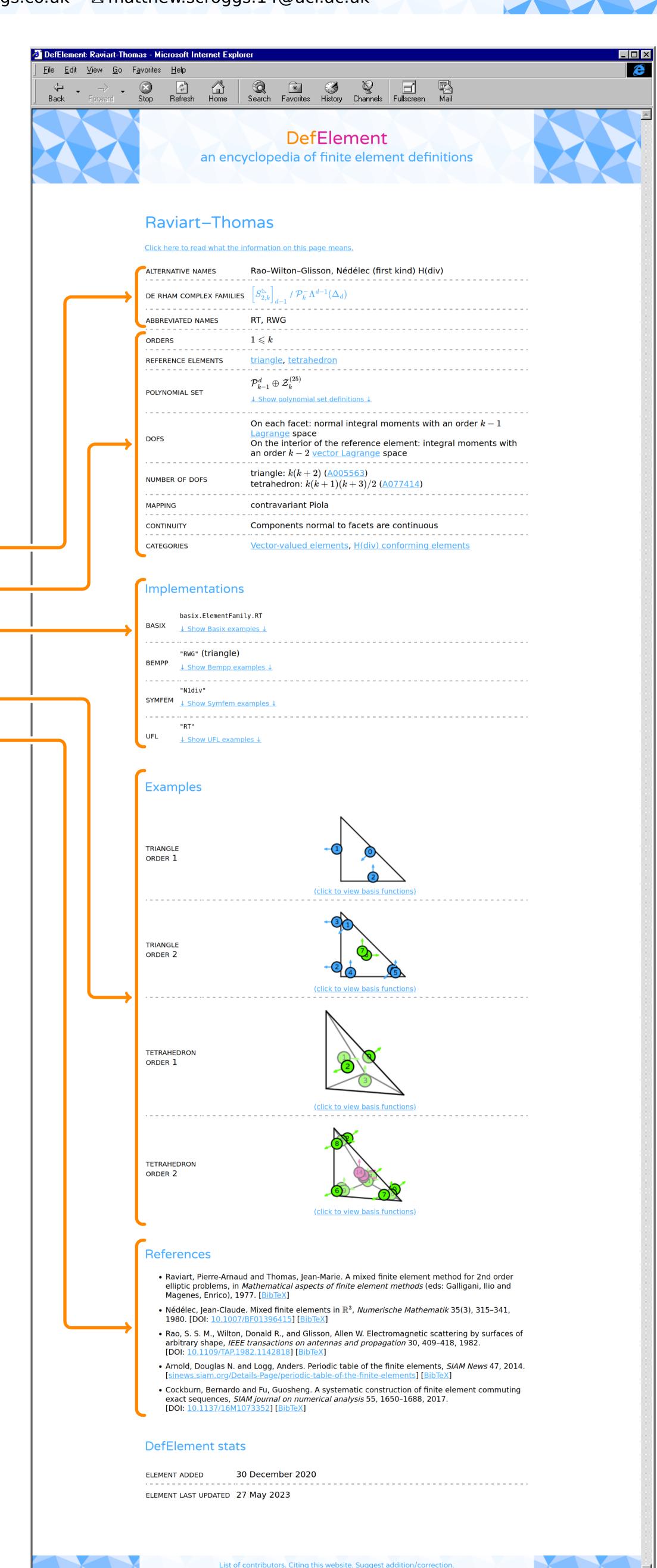
Can I contribute to DefElement?

Yes! DefElement's source code is available on GitHub (MIT license). You can contribute by opening GitHub issues for:

- New elements that could be added DefElement.
- Any improvements that you want to suggest.
- Any mistakes that you find.

Or, you could fork the repository and open a pull request to:

- Add implementation information for a finite element library that you use or maintain.
- Resolve any of the currently open issues: keep an eye out for anything tagged good first issue.
- Anything else you want to suggest changing.



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