

These are the supplementary materials for the poster [7] on fenicstools [6] presented by the authors on FEniCS'16 workshop

## CLÉMENT INTERPOLATION

The implementation of Clément interpolation in fenicstools follows the exposition of the topic presented in [2, ch. 2.6]. Therein the interpolant is constructed by finding the best patch-wise constant approximation. However, this is only a special case in the theory of Clément interpolants [3]. We note that treatment of  $H_0^1$  interpolation is discussed in [8]. Finally, we remark that the notion of finite element spaces on patches (more general polygonal domains) would allow for Virtual Finite Element method [1] to be used within FEniCS.

## LAGRANGIAN TRACKING

The book-keeping of particles in *LagrangianParticles* class is cell-based. Thus [4], [5]

## REFERENCES

### References

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