

## Patches of finite elements for singular solutions

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**Keywords:** a priori error estimate, multiplicative Schwarz algorithm, singularities of the solution of Poisson problems, glacier modeling.

In this talk we consider the finite element approximation of the singularities of the solution of Poisson problems in a polygonal domain with entrant corners or changing Dirichlet-Neumann boundary conditions. We use a correction algorithm with patches of elements to improve the a priori error estimates and to obtain the same order as the optimal estimate when everything is regular. We give an application of the correction method to the problem of glacier modeling.

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