

Why an Elmer/Ice-sheet

Elmer/Ice is more than an ice-sheet model !

This is its **strength** but also its weakness

i.e. too complicated for people doing climate study (GCM)

Need of a more user-friendly tool dedicated to Antarctica and Greenland applications

- lower order Stokes equations
- choice of given grid
- given input geometry
- given well-known parameters
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Elmer/Ice-sheet project

- French ANR project lead by IGE involving other French groups (LSCE, Météo-France – Climate users of GRISLI)
– answer this summer.
- Two types of developments required:
 - design of the tool (the black-box, the framework)
 - technical developments of missing **processes** (calving 3d, simplified hydrology,...) and **features** (moving margin, coupling with other system,...)
- Past, recent and future applications proposed to emphasize the ability of the new model to deal with fast changing dynamical conditions