Necessary ingredients:

- (Parallel) Sparse matrix by Vector product;
- Sparse triangular system solution;
- Dot products;
- Vector norms;

$$\|\mathbf{x}\|_1 = \sum_i |x_i|$$

$$\|\mathbf{x}\|_2 = \left(\sum_i |x_i|^2 \right)^{\frac{1}{2}}$$

$$\|\mathbf{x}\|_\infty = \max_i |x_i|$$

Note: we also need boundary data exchange and mesh management.