

A **Flexible** Primal-Dual Tool**Box**

Manual

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1 How-To

2 Arbitrary Operators

Classes: *L1operatorIso*, *L1operatorAniso*, *L2operator*, *frobeniusOperator*

Adding an arbitrary operator in some norm is simple. Let us assume we some term $\alpha\|Ku\|_{1,2}$ with

$$K = \begin{pmatrix} K_1 & K_2 \\ K_3 & K_4 \end{pmatrix}, u = \begin{pmatrix} u_1 \\ u_2 \end{pmatrix},$$

where the norm $\|\cdot\|_{1,2}$ refers to the isotropic L1-norm. We can insert this term into **FlexBox** by calling

```
1 %Begin: Code example
2 main.addTerm(L1operatorIso(alpha,2,{K_1,K_2,K_3,K_4}),[numberU_1,numberU_2]);
3 %End: Code example
```

The operator K has to be specified row-wise in a cell-array. The second argument 2 tells the toolbox that every two elements in the cell-array correspond to one row. Please note that empty blocks in K have to be specified as empty sparse matrices.

Todo list