PlaningFSI Documentation

Release 0.2.1

PlaningFSI

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PlaningFSI is a scientific Python program use to calculate the steady-state response of two-dimensional marine structures planing at constant speed on the free surface with consideration for Fluid-Structure Interaction (FSI) and rigid body motion. It was originally written in 2012-2013 to support my Ph.D. research and has recently (2018) been updated and released as open-source.

CHAPTER

ONE

CAUTIONARY NOTE

I am currently working on releasing this package as open source. Since this is my first open-source release, the next few releases on PyPI should not be used for production. I will release version 1.0.0 and remove this note once I feel that I have sufficiently cleaned up and documented the code.

CHAPTER

TWO

REQUIRED PYTHON VERSION

The code is written in Python and was originally written in Python 2.6.5. it has since been updated to require Python 3.6+.

CHAPTER

THREE

INSTALLATION

PlaningFSI can be installed with pip:

```
pip install planingfsi
```

CHAPTER

FOUR

CONTRIBUTING

To contribute, you should install the code in developer mode.

```
poetry install --develop=.
```

CHAPTER

FIVE

GETTING STARTED

The main command-line interface is called `planingFSI` and can be called directly, once appropriate input files have been prepared. A collection of examples can be found in the `tutorials` directory in the source package.

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