Newsletter PyRoll #1

Date: 05/2024

Dear PyRoll interested party,

We are pleased to publish our first newsletter about our open-source project PyRoll. We plan to publish it three times a year to inform you about current developments and information regarding the PyRoll software project.

Topics

- Current PyRoll version and repositories
- Publications on PyRoll
- Start of the validation funding project
- Setting up a forum on GitHub
- Workshop offer Basics of Groove Rolling
- Next dates

Current PyRoll version and repositories

This chapter is intended to provide regular information about new features of the software. This time we would like to give an overview of all existing repositories, plugins and extensions that are currently available in the open source area. The current core version is 2.1.5 and there are currently 17 plugins and 3 extensions available. The complete list including the description of the plugins/extensions can be found in our project documentation. The current roadmap can be found on GitHub.

Publications on PyRoll

- Fundamental scientific publication of the open-source framework PyRoll JOSS
- Conference paper on calibre design with PyRoll Key Engineering Materials
- Integration of Monte Carlo methods for estimating variations in the rolling process ESA Form 2024 and ESA Form 2023
- Modelling of the elastic plant behaviour during calibre rolling Rolling 2022

Start of the validation funding project

Last April, we held a successful kick-off meeting for our validation funding programme. The aim of the project is to carry out a technical and economic validation of the current status of PyRoll. The current version of PyRoll will be compared with experimental data and other simulation solutions in terms of its accuracy and speed. Furthermore, future development directions and functional extensions will be

developed in a market and customer benefit analysis. We were able to welcome over 20 people on site and online to the presentation of the project. You can find the minutes of the kick-off here: Protocol Kick-Off Validation Funding

Setting up a forum on GitHub

To enable you to interact directly with questions or suggestions about the software, we have now set up a forum on our Github page. This forum will serve as a lively meeting place for our community to get rid of questions about using PyRolL, exchange ideas and collaborate on projects. Whether you are an experienced developer, someone interested in PyRolL or someone passionate about open source, this forum is your space to connect, learn and grow with like-minded people. You can find the link to the forum here: Link to Github forum

Workshop offer Basics of Groove Rolling

In June, a four-day workshop on the basics of groove rolling will take place at the Institute of Metal Forming. In addition to the theoretical basics of groove rolling, a variety of application examples will be part of the training, whereby hands-on examples will be carried out with PyRolL. The training therefore offers a great opportunity to get a kick-start in the field of groove rolling and the use of PyRolL. The language of the event will be English. Further information can be found at the following Link or at the corresponding LinkedIn Event.

Next Dates

2024	Event	2025	Event
10.-13.06.2024	Workshop "Basics of Groove Rolling"	27.02.2025	PyRolL User Meeting
28./29.08.2024	Freiberger Kalibreurstag	16.-19.06.2025	Workshop "Basics of Groove Rolling"
29.08.2024	PyRolL User Meeting	20.06.2025	Validation Funding Final Project Meeting
02./03.10.2024	AiKW Meeting		

We will announce further information on upcoming events via our channels (GitHub forum, LinkedIn, newsletter).

Greetings from Freiberg and a hearty "Glück Auf!"

The PyRolL Team