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Bachelor Thesis Work

of Choose title Name, Surname

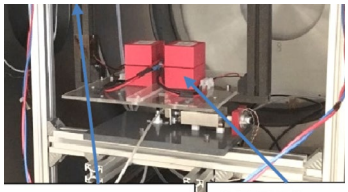
Kalibrierung des Impulsbit-Pendelsystems

Calibration of impulse bit pendulum system

Motivation:

Pulsed Plasma Thrusters (PPTs) have established themselves as a robust and reliable technology. Researchers worldwide are drawn to investigate them due to their low mechanical complexity and accessibility. While they may lack in efficiency, they make up for it with their use of solid fuel, eliminating the need for heavy tanks and complex flow control systems. To enhance current designs, precise measurement of thruster performance is essential. In preparation for our upcoming tests, it is imperative to obtain an accurate estimation of the impulse bit, a task that hinges on the calibration of the pendulum.

Within the realm of diagnostics, the student's mission is to develop a dependable calibration method for the pendulum using impulse generation. This task may involve creating an electric comb with a pulsed electric generator or constructing a mechanical impulse system from the ground up. You will be involved in every step, from the drawing board to the testing stand. This undertaking represents a challenging engineering project that holds the promise of refining your design and technical skills.



Impulse pendulum PETRUS 2.0

Task:

- Development of Calibration of impulse bit pendulum system
- Design, calculations and proof of concept
- Implementation: Test and verification
- Documentation

Supervisor: Velin Yordanov

Starting date: Click for date

Submission until: Click for date

Acknowledgement of receipt:
I hereby confirm that I read and understood the task of the bachelor thesis, the juridical regulations as well as the study- and exam regulations.

_____
Date
PD Dr.-Ing. Georg Herdrich
(Responsible Professor)

_____
Date
Signature of the student

Declaration

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