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The Furuta Pendulum

Technical Report

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Abstract The Furuta Pendulum is an example of a complex non-linear system and therefore of big interest in control system theory. It consists of one controllable arm rotating in the horizontal plane and one pendulum uncontrollably moving in the vertical plane, which is attached to the end of this arm.
The non-linearities result from an interplay between gravitational, Coriolis and centripetal forces.
XX We present an overview over it's technical details and proposed algorithms to solve the control problem. XX

Keywords First keyword · Second keyword · More

1 Introduction

Your text comes here. Separate text sections with

2 Section title

Text with citations [2] and [1].

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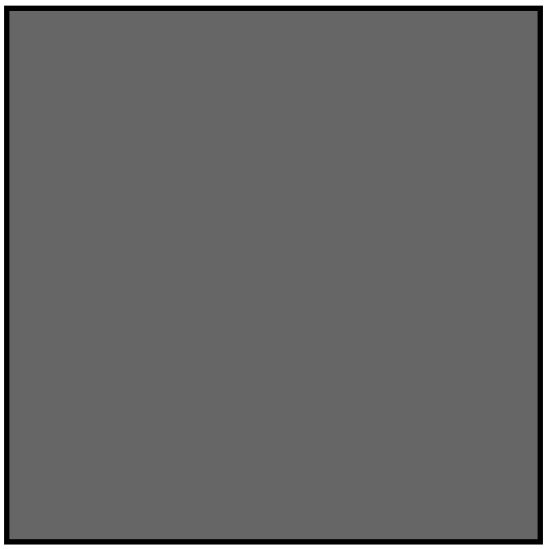

Fig. 1 Please write your figure caption here

Table 1 Please write your table caption here

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2.1 Subsection title

as required. Don't forget to give each section and subsection a unique label (see Sect. 2).

Paragraph headings Use paragraph headings as needed.

$$a^2 + b^2 = c^2 \tag{1}$$

References

1. Author, Article title, Journal, Volume, page numbers (year)
2. Author, Book title, page numbers. Publisher, place (year)

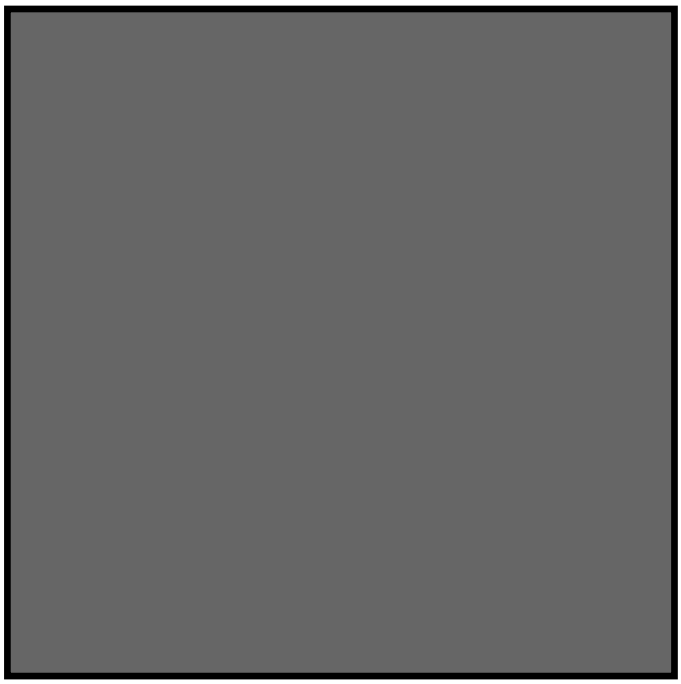

Fig. 2 Please write your figure caption here