

# Propositions

attached to the thesis

## **New Models and Applications for Railway Timetabling**

Gerrit Jacob Polinder

Erasmus University Rotterdam

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## I

In order to reduce passenger travel times, railway operators need to stop forcing trains to run in regular patterns with equally distributed headway times.

*Chapter 3*

## II

Designing a railway schedule based on the largest OD-pairs leads to a smaller problem to solve, while losing only little in terms of optimality.

*Chapter 3*

## III

The fact that timetabling instances can be infeasible should be considered when designing timetabling algorithms.

*Chapters 4 and 5*

## IV

Linear approximations are a very good and practical choice, although in general better approximations exist.

*Chapter 6*

## V

Integrating several planning problems leads to a problem that is interesting from a theoretical point of view, but in practice is hard to solve. For the coming years, sequential scheduling is a practically more suitable solution approach.

*This thesis*

## VI

The train brings you from a place that is not your origin, to a place that is not your destination.

## VII

In order to be successful in doing research, it is important to know when a paper is finished.

## VIII

A Decision Support System can only be successfully employed in practice if the end-user is actively involved in the design process of the system.

## IX

The fastest way to master something is by explaining it to others.

## X

Writing code ‘quick and dirty’ under time pressure is not a good strategy, as it can hit you back in the face at very inconvenient times.

## XI

A rubber duck is one of the most useful tools for researchers.