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A Column Generation Approach to High School Timetabling Modeled as a Multicommodity Flow Problem

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Highlights

- We model the high school timetabling problem with compactness requirements.
- We propose two new models using a multicommodity flow representation.
- We propose a column generation approach for providing lower bounds for the problem.
- We found tight lower bounds that can be generated faster than previous approaches.
- New best lower bounds were found for five from twelve well-known instances.

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