ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO THE PRESENTATION ABOUT THE WORK-PLACEMENT

Bin packing for wood loading

Muamer Hrncic | Alpen-Adria-Universität Klagenfurt

Chaired by Angelika Wiegele | Department of Mathematics

Wednesday, 18 September 2019 | 10:30–11:00

N.2.01

ABSTRACT

The increasing order of construction timber according to projects presents the wood industry with the problem that the combination of easily loadable and transportable packages becomes extremely complex due to the different lengths and dimensions of the timber.

The company pichler/netz is developing a portal for the distribution of structural timber for the sawmill and carpentry industry. For the portal it is absolutely necessary to be able to load the trucks virtually at the time of ordering in order to achieve an optimal utilization of the trucks. This makes it possible to offer collective orders and thus achieve a competitive advantage over competitors.

Despite having a problem in 3D, a large class of instances can be represented as a 2D bin packing problem. We present our model and give some numerical results. We also present a cutting stock model that showed up in this context during our research.

Muamer Hrncic was employed as project staff within an FFG funded project at the Department of Applied Informatics.

We hope to see you there!