

# “Group Theory International” Online Seminar

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*“Knapsack Problems in Products of Groups”*

**Thursday, November 13, noon (New York Time)**

**Abstract:**

The classic knapsack and related problems have natural generalizations to arbitrary (non-commutative) groups, collectively called knapsack-type problems in groups. We study the effect of free and direct products on their time complexity. We show that free products in certain sense preserve time complexity of knapsack-type problems, while direct products may amplify it.

This is joint work with Elizaveta Frenkel and Alexander Ushakov.

Next presentation: **Nov 20, Artem Shevlyakov (Omsk State University, Russia)**