

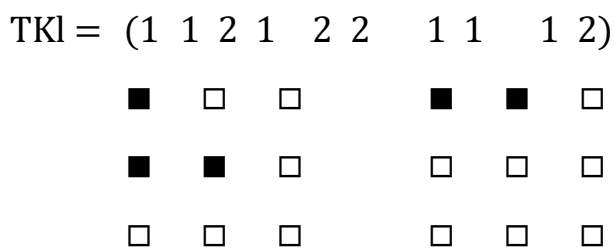
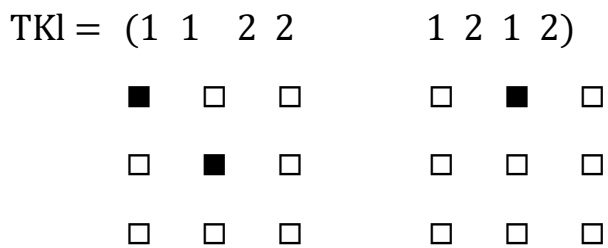
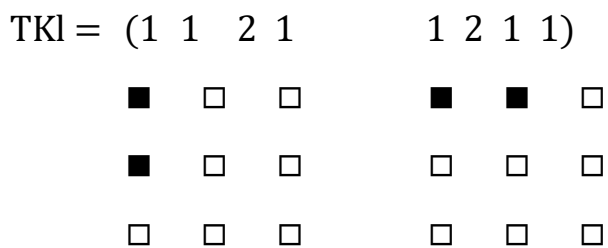
Prof. Dr. Alfred Toth

Zur trajektischen Arithmetik

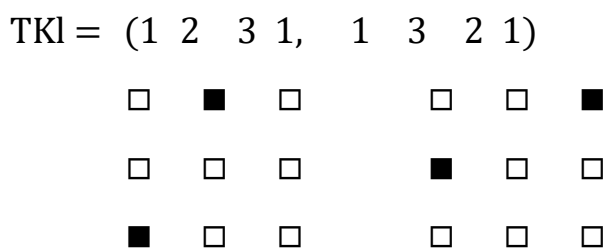
1. Wir benutzen die in Toth (2026) dargestellten Strukturdiagramme nicht-eigentrajektischer dualer Relationen, um zwei elementare Operationen der trajektischen Arithmetik aufzuzeigen: Addition und Subtraktion.

2. Trajektische Addition

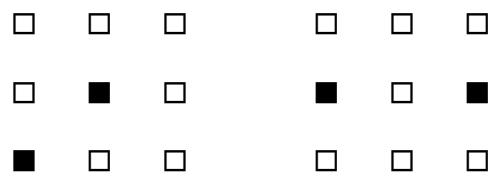
Beispiel: TKI $(1, 1, 2, 1 \mid 1, 2, 1, 1) + (1, 1, 2, 2 \mid 1, 2, 1, 2) = (1, 1, 2, 1, 2, 2 \mid 1, 1, 1, 2)$



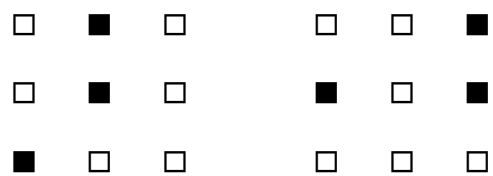
Beispiel: TKI $(1, 2, 3, 1 \mid 1, 3, 2, 1) + (2, 2, 3, 1 \mid 2, 3, 2, 1) = (1, 2, 2, 2, 3, 1 \mid 1, 3, 2, 1, 2, 3)$



$$\text{TKI} = (2 \ 2 \ 3 \ 1, \ 2 \ 3 \ 2 \ 1)$$



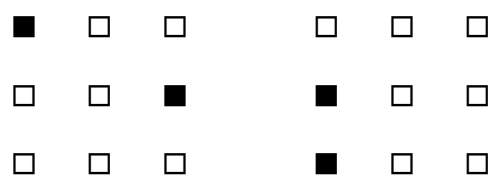
$$\text{TKI} = (1 \ 2 \ 2 \ 2 \ 3 \ 1 \quad 1 \ 3 \ 2 \ 1 \ 2 \ 3)$$



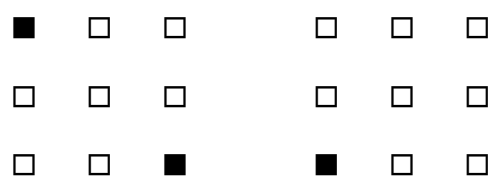
3. Trajektische Subtraktion

$$\text{Beispiel: } (2, 3, 1, 1 \mid 2, 1, 3, 1) - (3, 3, 1, 1 \mid 3, 1, 3, 1) = (2, 3, 3, 3 \mid 2, 1, 3, 1)$$

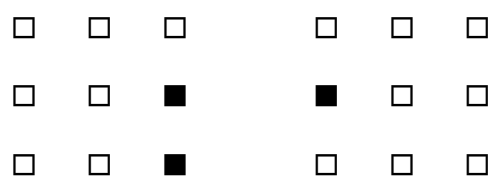
$$\text{TKI} = (2 \ 3 \ 1 \ 1 \quad 2 \ 1 \ 3 \ 1)$$



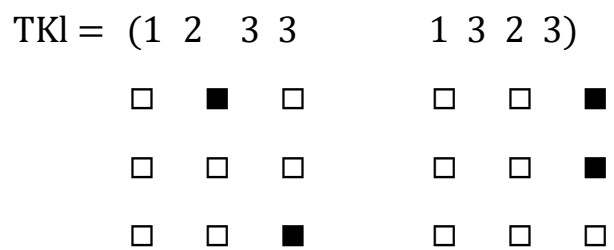
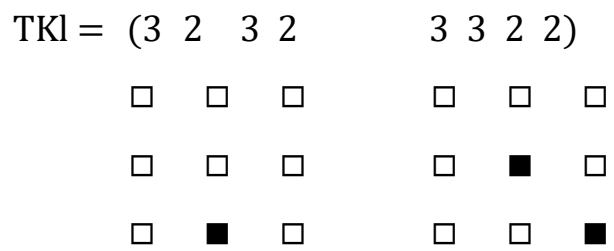
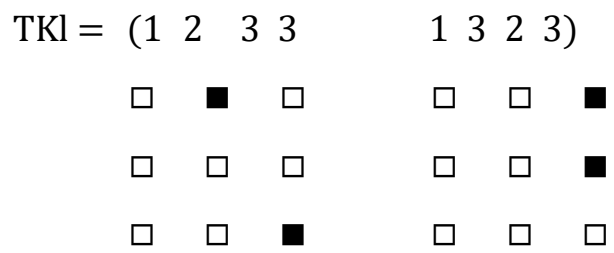
$$\text{TKI} = (3 \ 3 \ 1 \ 1 \quad 3 \ 1 \ 3 \ 1)$$



$$\text{TKI} = (2 \ 3 \ 3 \ 3 \quad 2 \ 1)$$



$$\text{Beispiel: } (1, 2, 3, 3 \mid 1, 3, 2, 3) - (3, 2, 3, 2 \mid 3, 3, 2, 2) = (1, 2, 3, 3 \mid 1, 3, 2, 3)$$



Literatur

Toth, Alfred, Strukturdiagramme nicht-eigentrajektischer dualer Relationen.
 In: Electronic Journal for Mathematical Semiotics, 2026

12.4.2026