

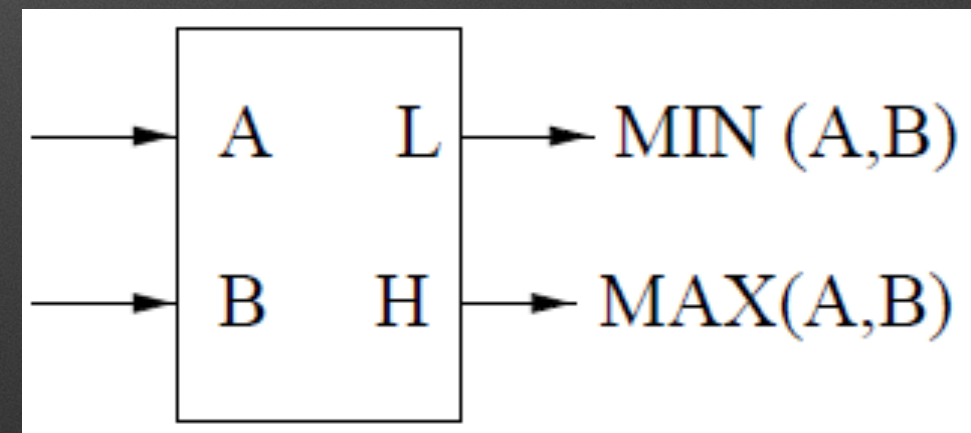
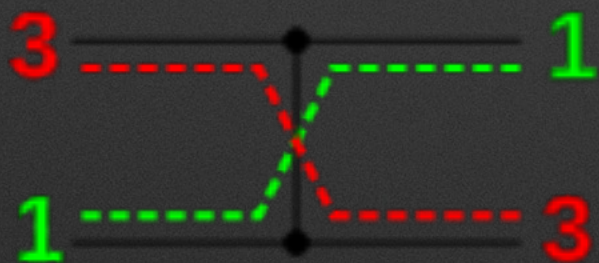
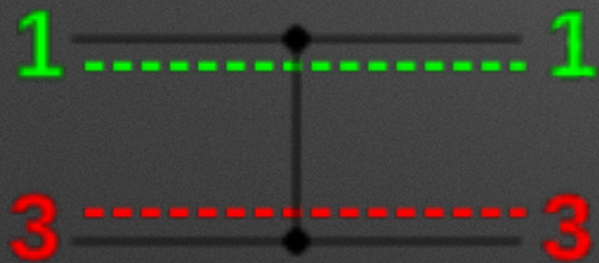
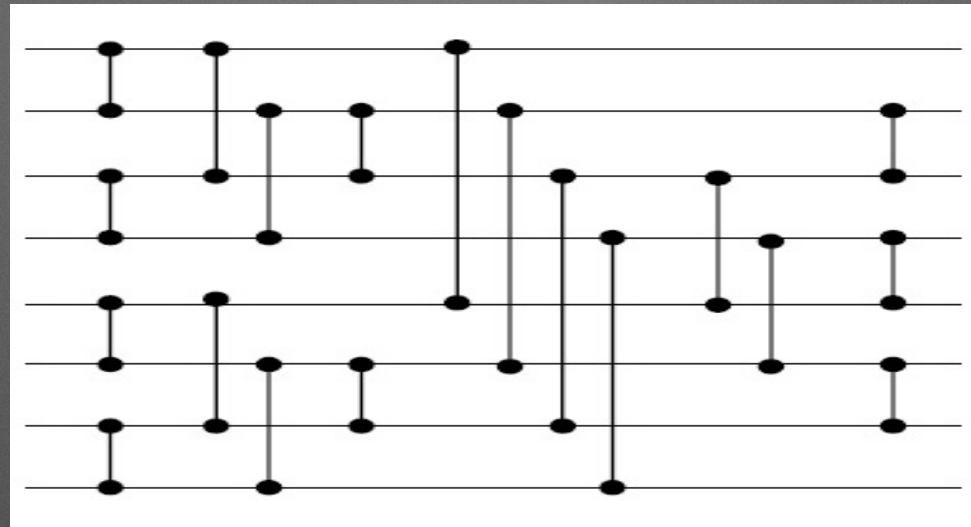
# Sorteernetwerken van Optimale Grootte

Mathias Dekempeneer  
Vincent Derkinderen

Begeleider: Tom Schrijvers

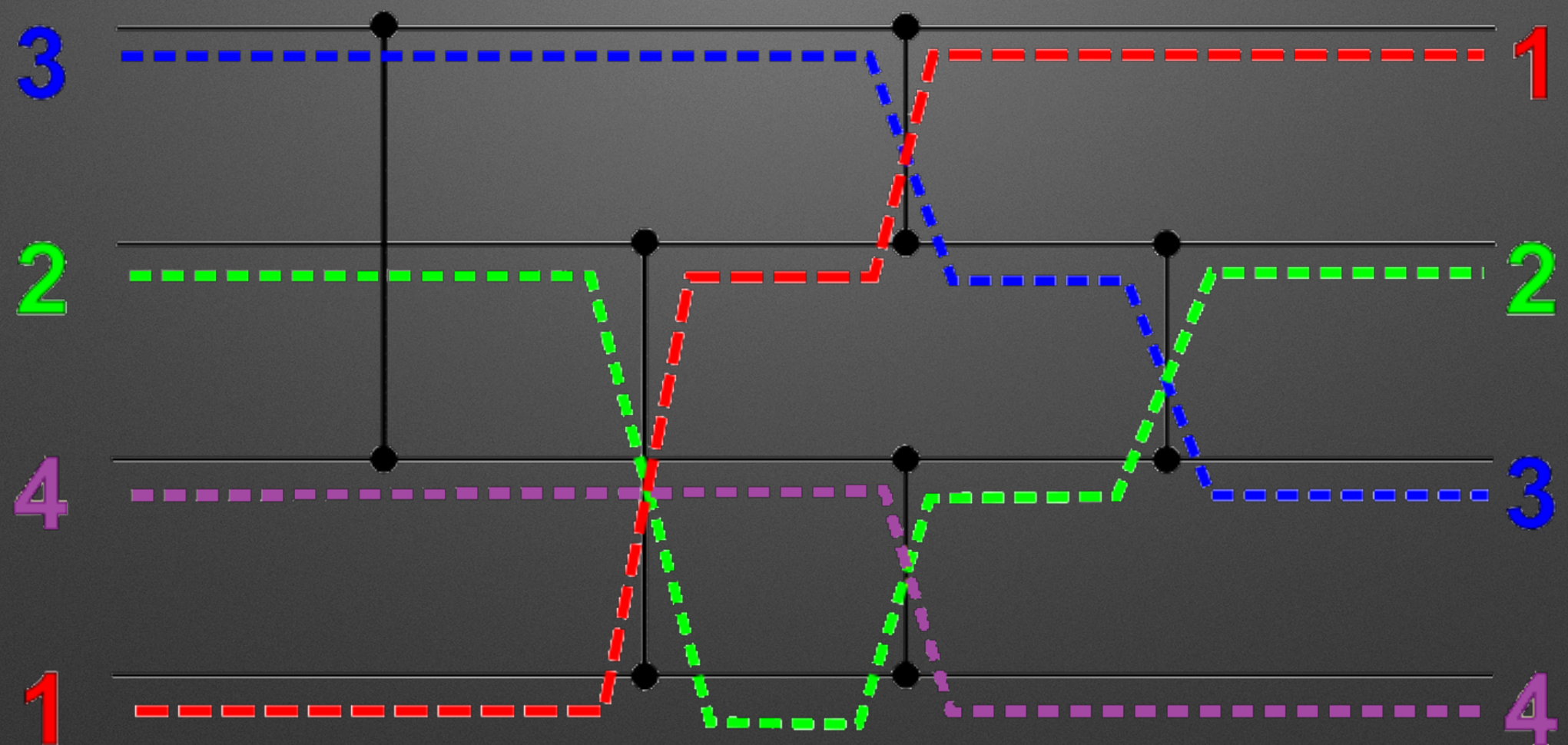


# Comparator Network





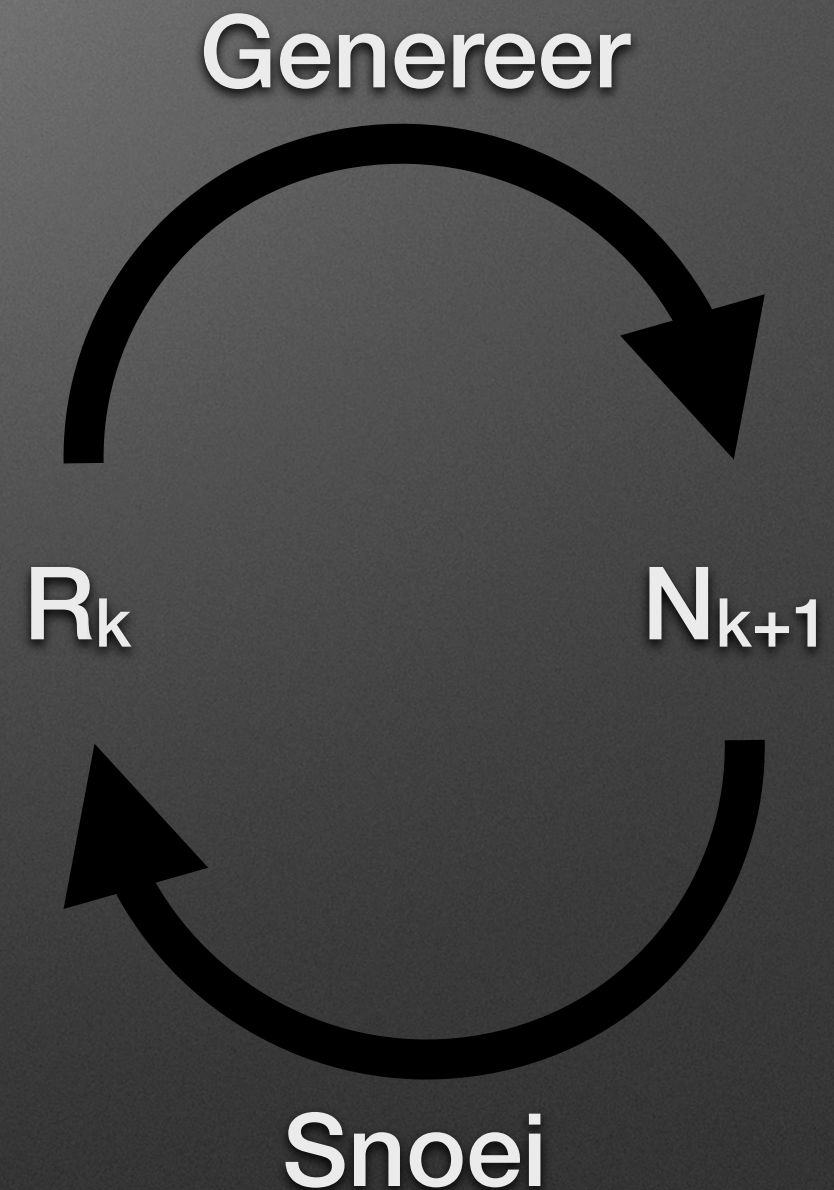
# Sorteernetwerk





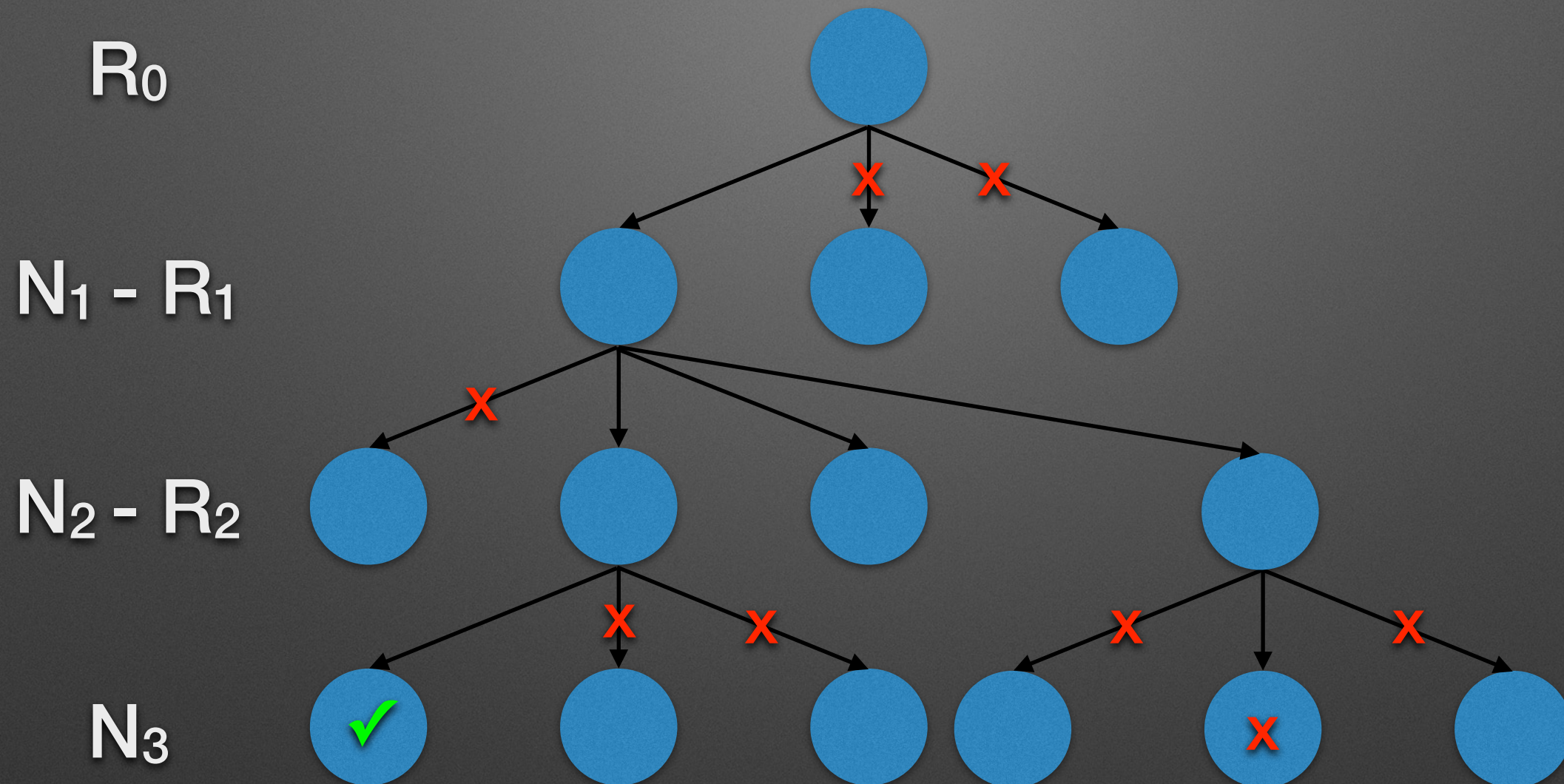
# Genereer & Snoei

- Genereer:  
toevoegen alle mogelijke  
comparatoren
- Snoei:  
subsumes principe





# Generereer & Snoei



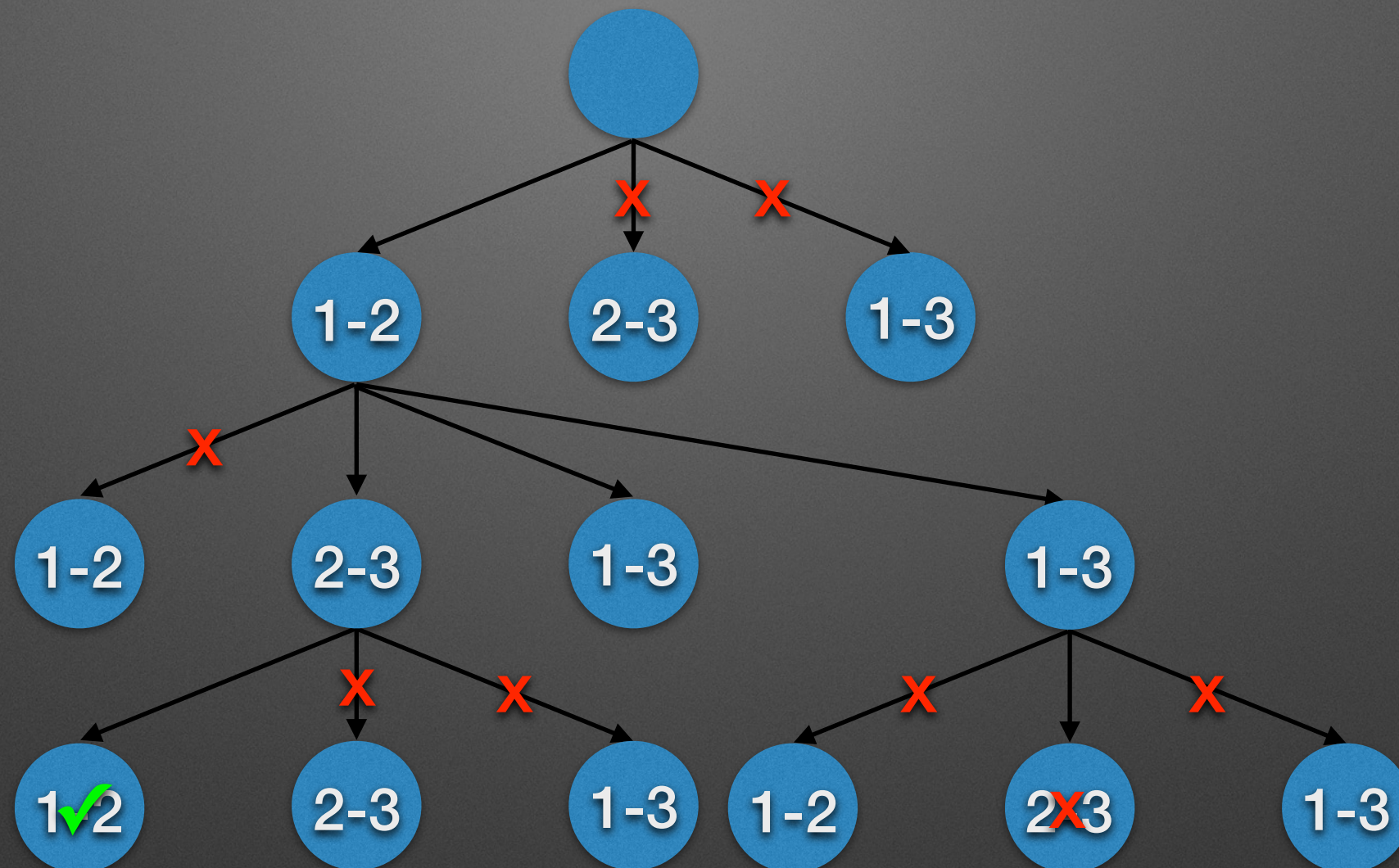


# Subsumes

- Beschreven in “TWENTY-FIVE COMPARATORS IS OPTIMAL WHEN SORTING NINE INPUTS (AND TWENTY-NINE FOR TEN)”  
(*Codish et al.*)
- $C_a$  subsumes  $C_b \Leftrightarrow C_a$  wordt gedekt door  $C_b$
- Verwijder de netwerken die anderen dekken



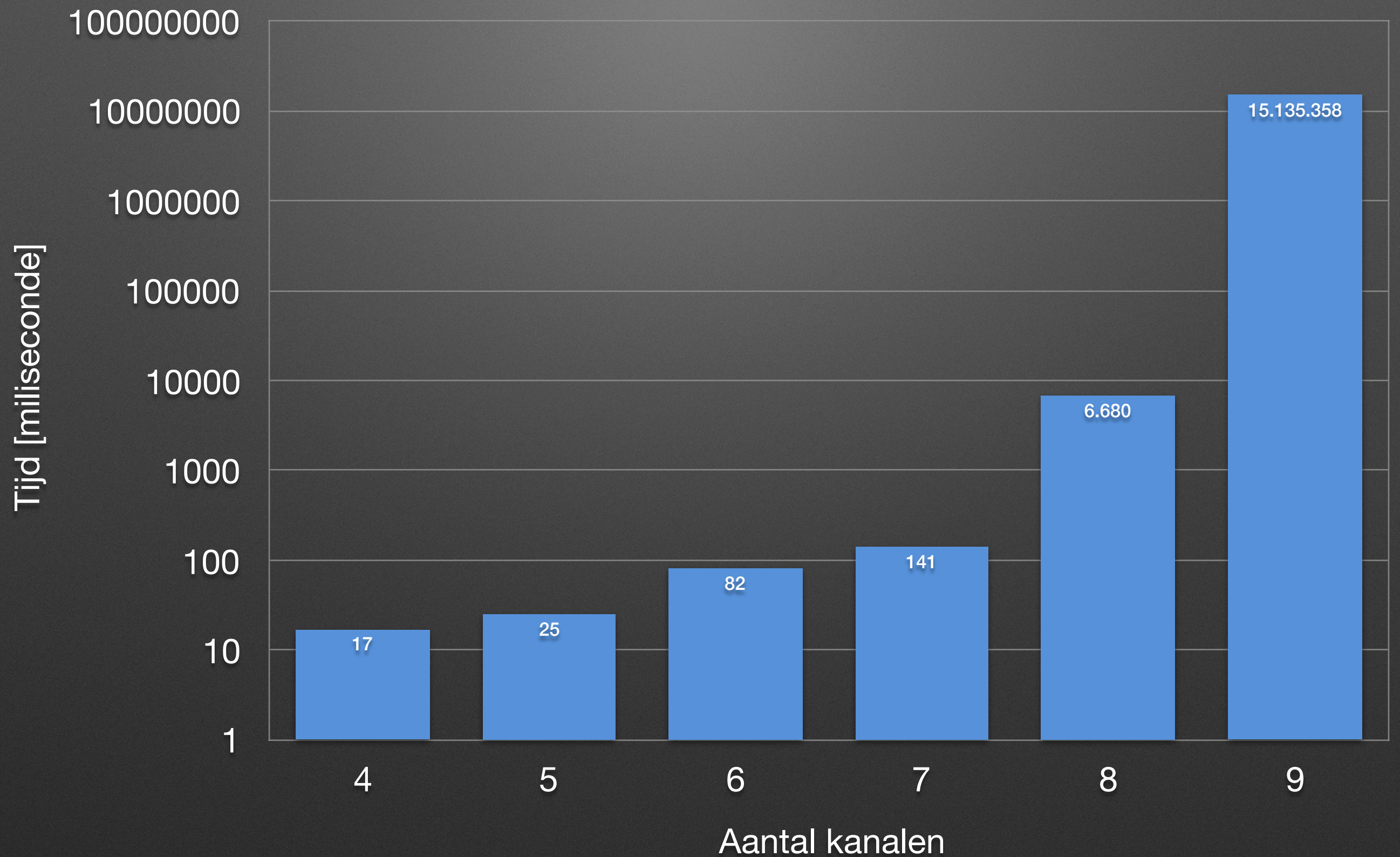
# Genereer & Snoei



**Gevonden sorteernetwerk: (1-2) (2-3) (1-2)**

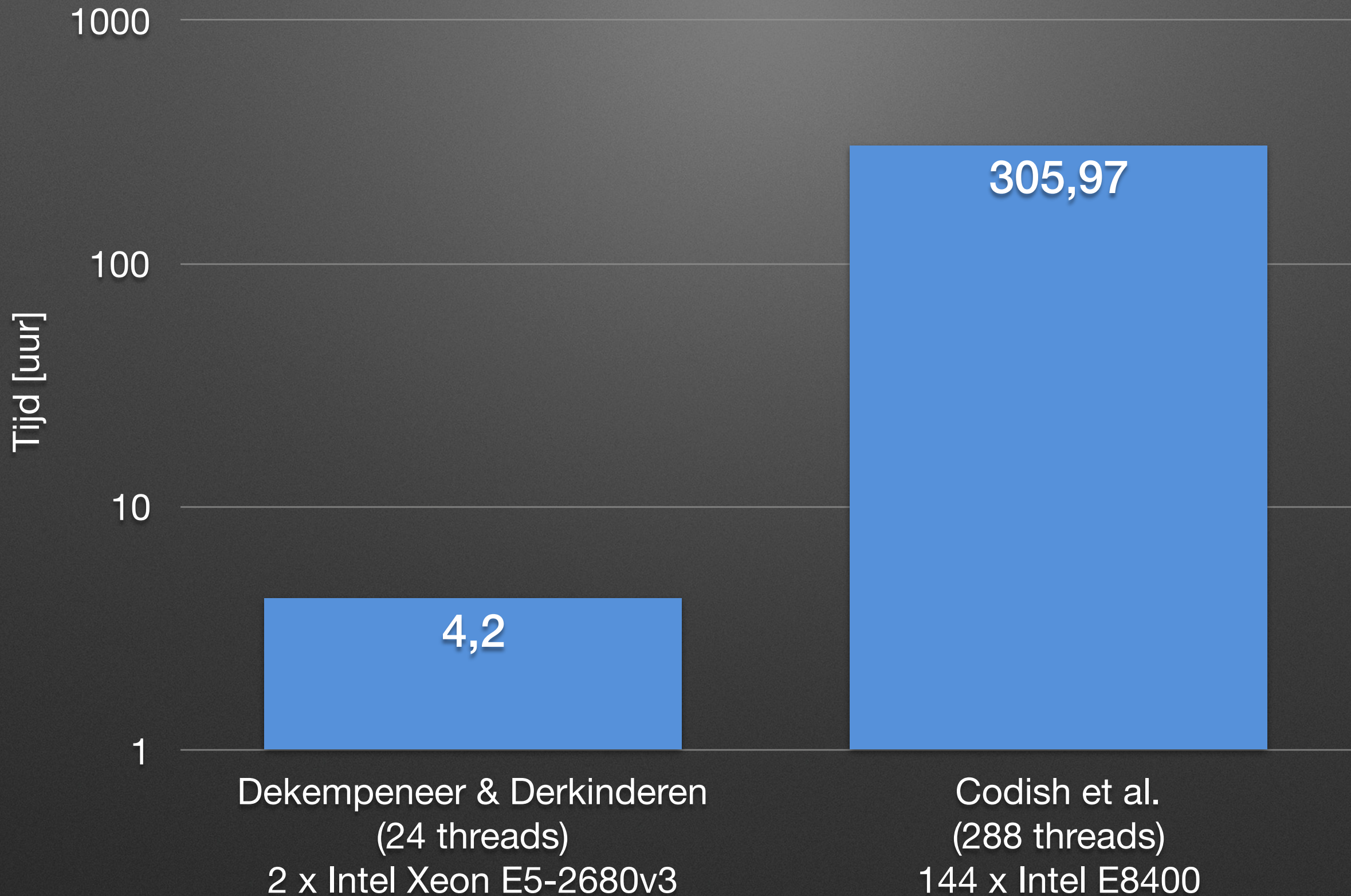


# Resultaten





# Resultaten





# Conclusie

## WAT?

Resultaten van de paper gereproduceerd

## WAT VOLGT?

Bekijken reden van verbetering

Implementatie voor meerdere nodes

Verbeteringen voor het algoritme zoeken