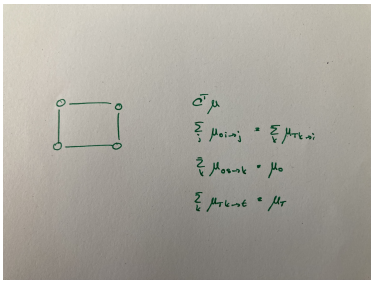
08.05.2024 graph of measures

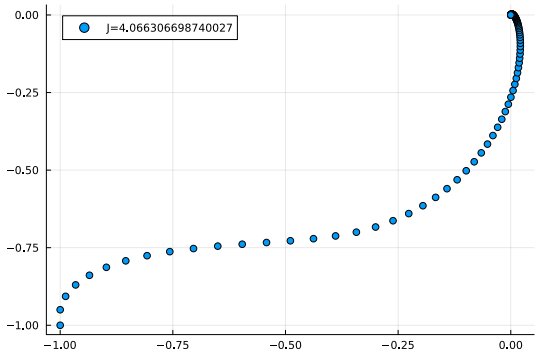
1 Background

$$
\begin{aligned}
\text{minimize} \quad & \sum_{u\to v} \ell_{u\to v} \cdot x_{u\to v} \\
\text{subject to} \quad & \sum_u x_{u\to s} - \sum_w x_{s\to w} = 1 \\
& \sum_u x_{u\to t} - \sum_w x_{t\to w} = -1 \\
& \sum_u x_{u\to v} - \sum_w x_{v\to w} = 0 \quad \text{for every vertex } v \neq s, t \\
& x_{u\to v} \geq 0 \quad \text{for every edge } u\to v
\end{aligned}
$$

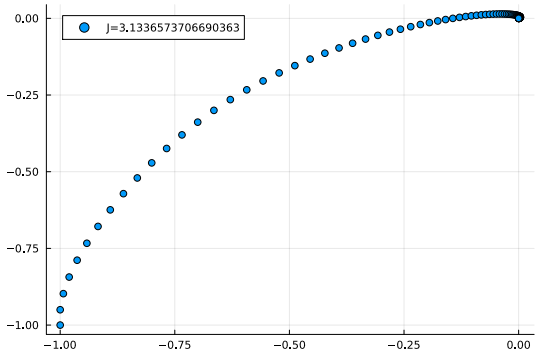
2 Method



3 Results



GMP lower bound 3.284206413152301



GMP lower bound 2.9969508477152416

Graph of measures lower bound 2.996950836877236

Path [9.579744885314905e-7, 9.57974555007202e-7, 0.9999990420255486, 0.9999990420255576]

4 References

https://arxiv.org/abs/math/0703377