

Algorithmen zur Visualisierung von Graphen

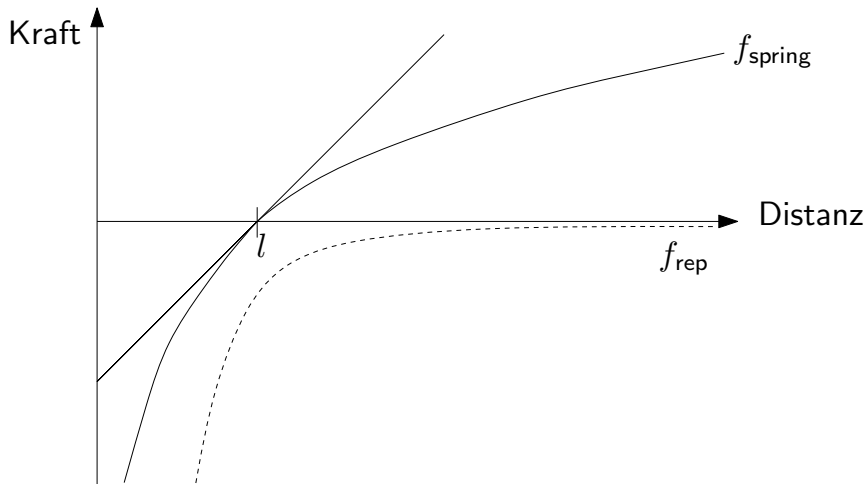
Kräftebasierte Verfahren – Teil 2

Vorlesung im Sommersemester 2009

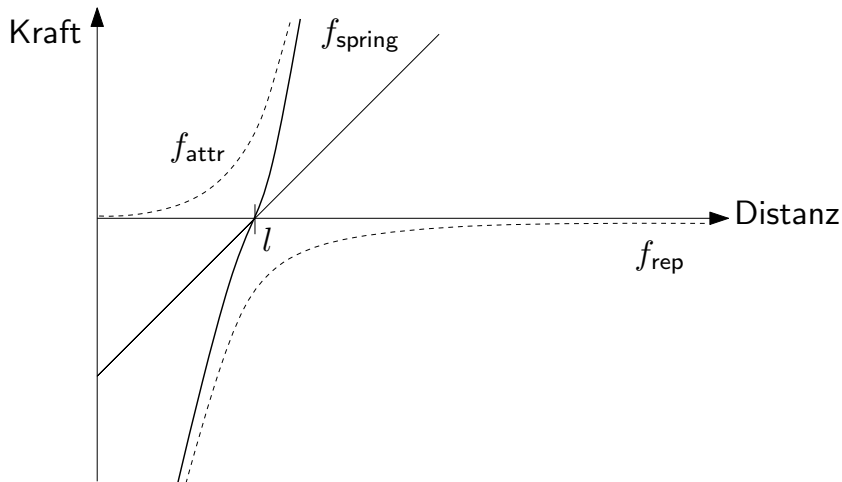
Martin Nöllenburg

30.04.2009

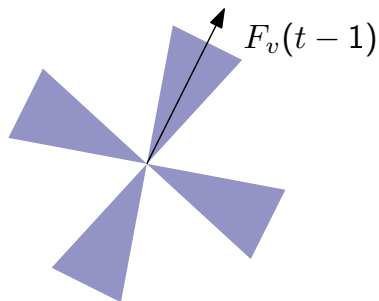
Kräftediagramm Spring-Embedder nach Eades (1984)



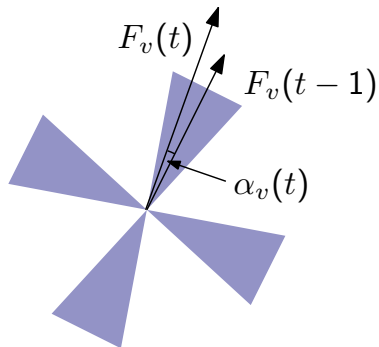
Kräfte diagramm nach Fruchterman/Reingold (1991)



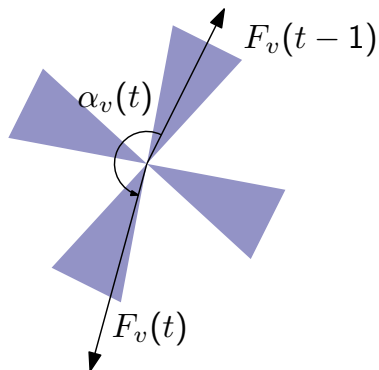
Adaptive Verschiebeweite



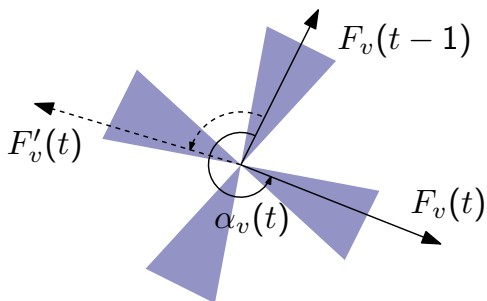
Adaptive Verschiebeweite



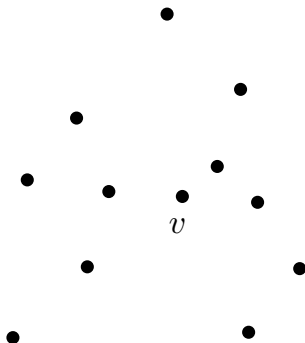
Adaptive Verschiebeweite



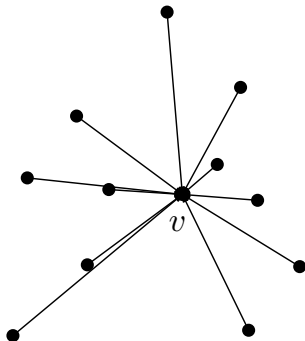
Adaptive Verschiebeweite



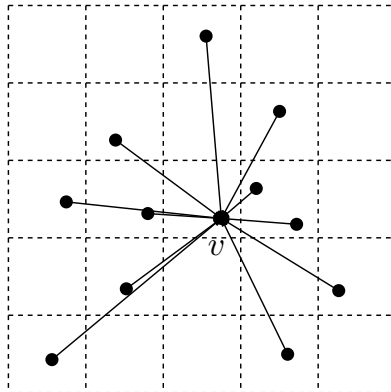
Gittertechnik



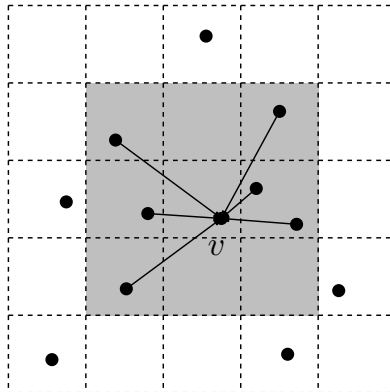
Gittertechnik



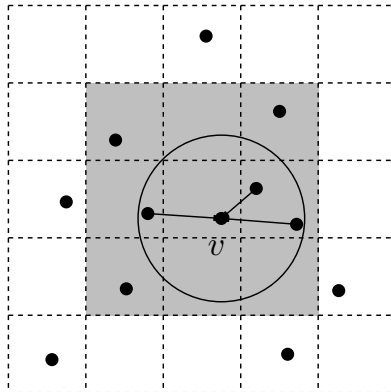
Gittertechnik



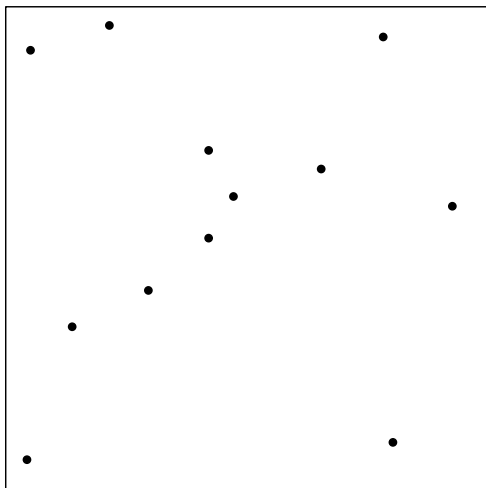
Gittertechnik



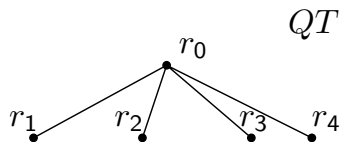
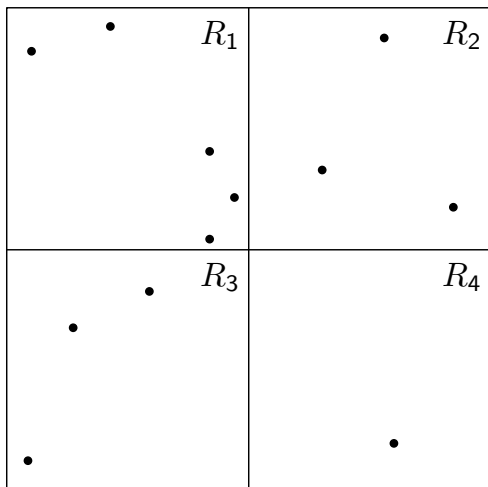
Gittertechnik



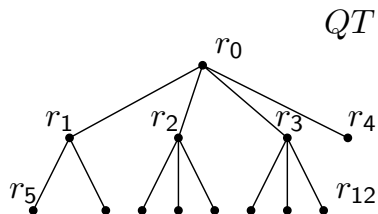
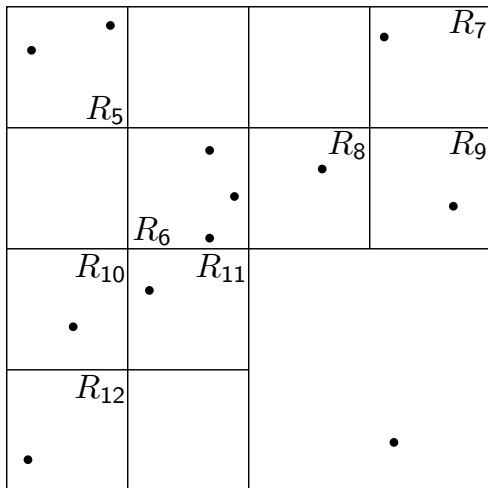
Quad-Tree

 R_0 r_0 QT

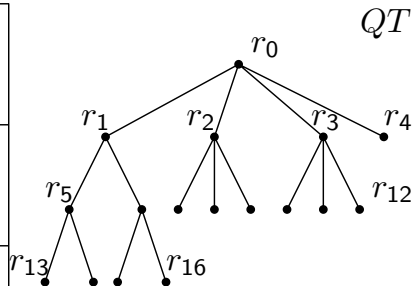
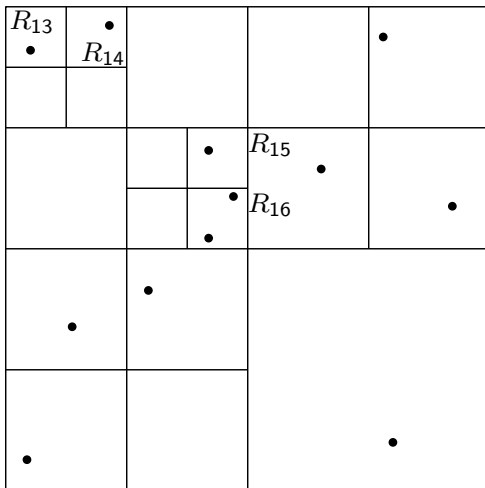
Quad-Tree



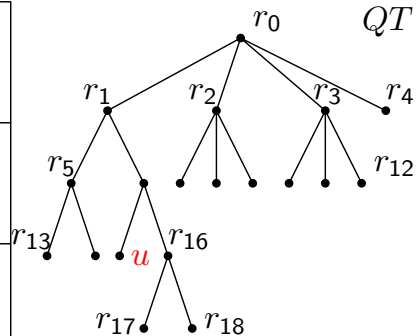
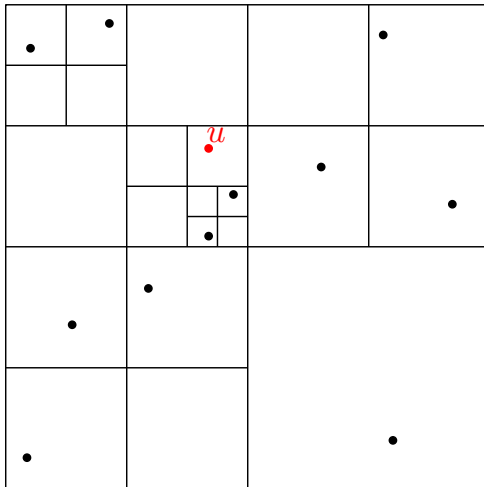
Quad-Tree



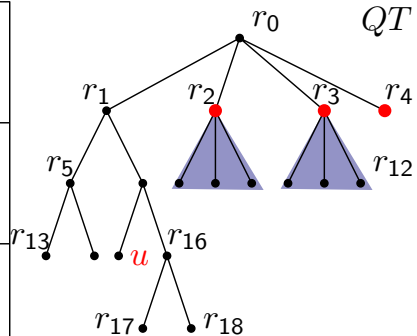
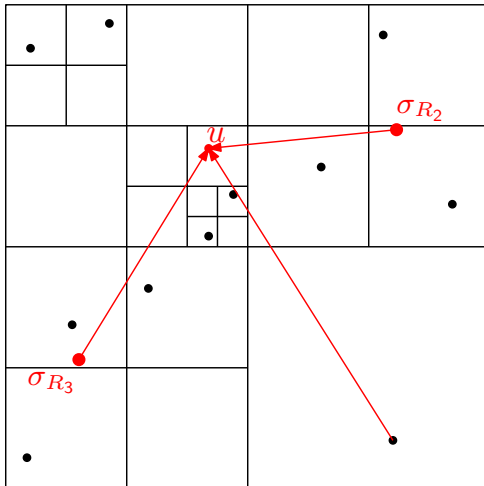
Quad-Tree



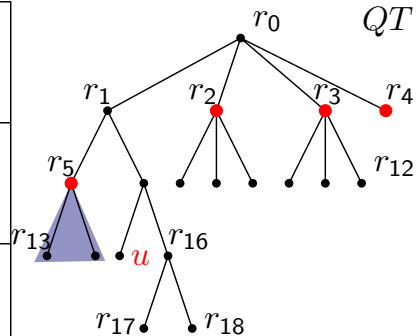
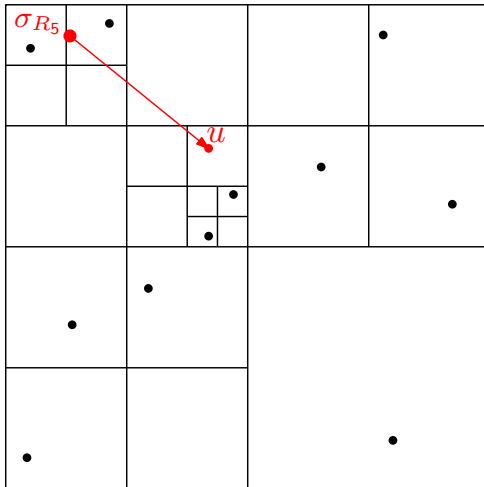
Berechnung abstoßende Kräfte



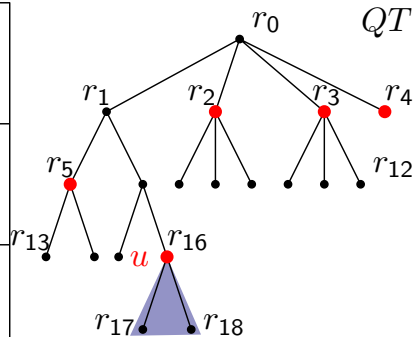
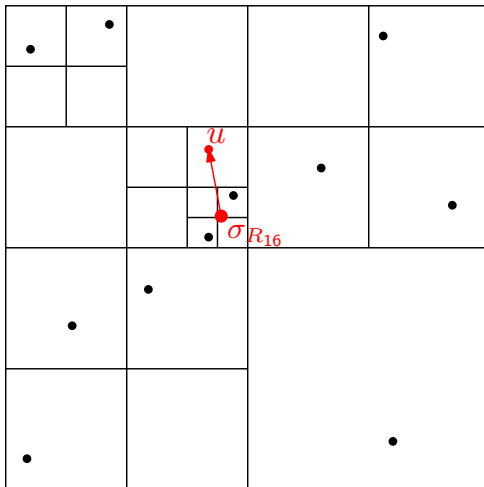
Berechnung abstoßende Kräfte



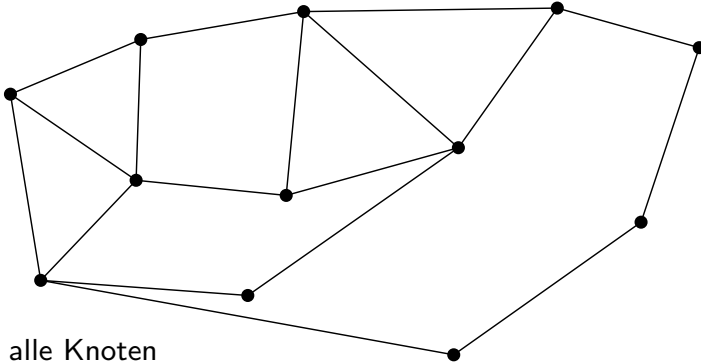
Berechnung abstoßende Kräfte



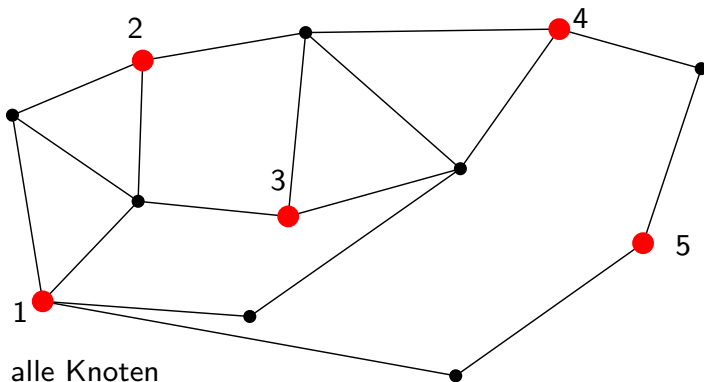
Berechnung abstoßende Kräfte



MIS-Vergrößerung



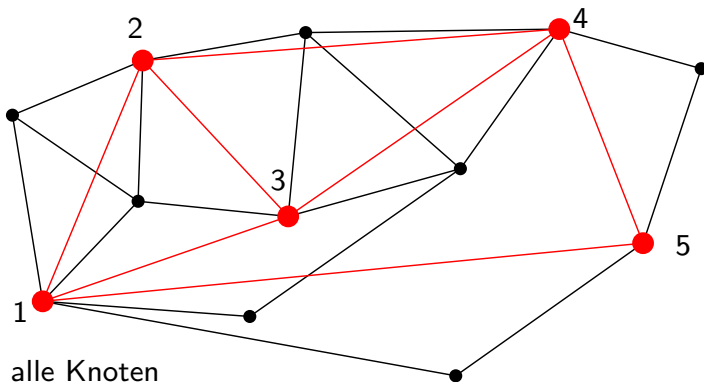
MIS-Vergrößerung



V_0 : alle Knoten

$V_1 = \{1, 2, 3, 4, 5\}$ (MIS in V_0)

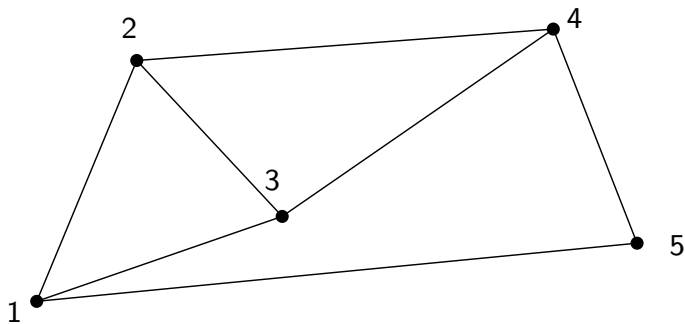
MIS-Vergrößerung



V_0 : alle Knoten

$V_1 = \{1, 2, 3, 4, 5\}$ (MIS in V_0)

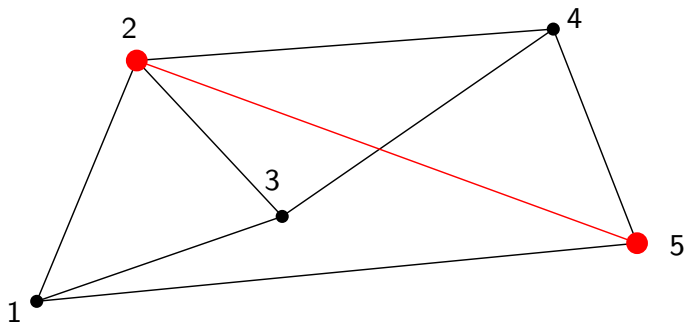
MIS-Vergrößerung



V_0 : alle Knoten

$V_1 = \{1, 2, 3, 4, 5\}$ (MIS in V_0)

MIS-Vergrößerung



V_0 : alle Knoten

$V_1 = \{1, 2, 3, 4, 5\}$ (MIS in V_0)

$V_2 = \{2, 5\}$ (MIS in V_1)