

# Glossar

## Acronyms

Acronym	Description	Page(s)
<b>APSP</b>	All-Pairs Shortest Path	1
<b>SPSP</b>	Single-Pair Shortest Path	1
<b>SSSP</b>	Single-Source Shortest Path	1

## Symbols

Symbol	Unit	Description	Page(s)
$a$	$\text{m/s}^2$	acceleration	1
$F$	$\text{m} \cdot \text{kg} \cdot \text{s}^{-2} = \text{J/m}$	force	1
$f$	$\text{s}^{-1}$	frequency	1
$l$	m	length	1
$m$	kg	mass	1
$t$	s	time	1

# Introduction

In graph theory, the solution of the problem of the shortest path between two nodes is often sought. This problem is often referred to as Single-Pair Shortest Path (SPSP). It can be extended to the variations Single-Source Shortest Path (SSSP) and All-Pairs Shortest Path (APSP). Different algorithms are used to solve SPSP, SSSP or APSP.

The units for the frequency  $f$  as well as the force  $F$  are derived from the SI"=units of the basic quantities length  $l$ , mass  $m$  and time  $t$ .and then there is the basic equation of mechanics, which in the case of a constant force effect in the direction of movement of a point mass reads:

$$F = m \cdot a$$