

En ode til Euler

November 30, 2020

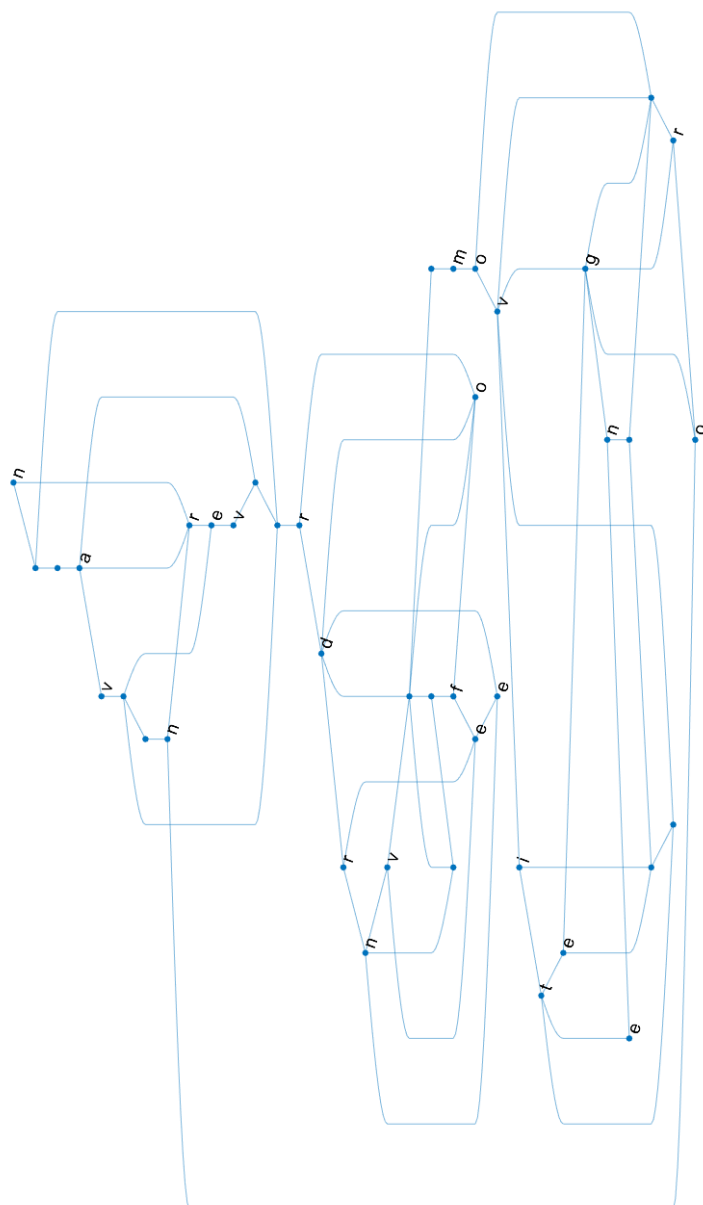
1 Euler

Euler både brukte og introduserte flere sentrale matematiske funksjoner og begreper. (Hint: `".join([char(a) for a in A])`)

$$A = \begin{bmatrix} \binom{8}{4} + \binom{5}{1} \\ |45 + 108i| \\ \cos(\frac{\pi}{3})\binom{12}{3} \\ |105 + 36i| + 4E_0(75) \\ 2\ln(e^{58}) \\ \phi(189) + e^{i\pi} \\ E_2(10) - 7\cos(\pi) \\ \sin(\frac{\pi}{6})\phi(484) + e^{i\pi} \\ E_2(11) + \cos(\pi) + i\sin(\pi) \\ \sin(\frac{\pi}{6})\phi(303) + \sin(\pi/2) \\ \cos(\frac{\pi}{3})\phi(458) \end{bmatrix}$$

2 Sykler

Euler fant ingen, men William Rowan hadde ingen problemer med å finne en.



3 Finn n

Filen `h` implementerer funksjonen `h`.

a) $h(n) = 8,8$

b) $h(n) = 217772874500023635365563422386019273512381236824318290514$
 $357322123165713825792, 636647330747919895136525940302294632068470331$
 $2327082618635039539200000000000000$

c) $h(n) =$

900
0,3756326117848493706034345777213934145547380150921415411200

d) $h(n) = 2000000000000001220000000000000120,99999922911895859181617256996352$ (hint: $n = p \cdot q$)