Oppgave 1

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Abstract

tekst

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vi ønsker å løse integrallikningen:

$$-\pi\phi(\bar{x}\bar{y}) + \int_S \phi \frac{\partial}{\partial n} \ln r dS = \int_S \frac{\partial \phi}{\partial n} \ln r dS \tag{1}$$

der $\partial\phi/\partial n = n_1$ langs med S.

Diskret integrallikning.

$$-\pi\phi + \Sigma_{m=1}^{N} \phi_m(-\Delta\Theta_{n,m}) = \sum_{m=1}^{N} [\frac{\partial \phi}{\partial n}]_m h_{n,m} \tag{2}$$

Addert masse kan approksimeres slik:

$$m_{ij} = \rho \int_S \phi_j n_i dS \simeq \rho \sum_{m=1}^{N} [\phi_j]_m [n_i]_m \Delta S_m. \tag{3}$$

3 Figurer

a) Diskretisering av ellipse

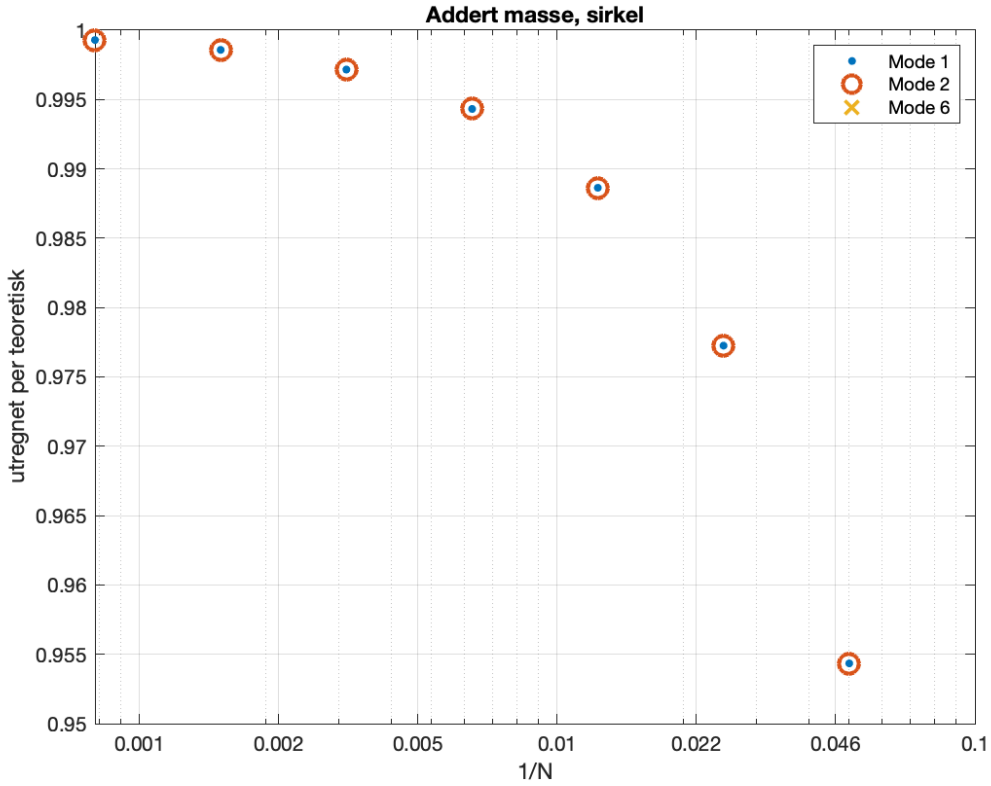

Figure 1

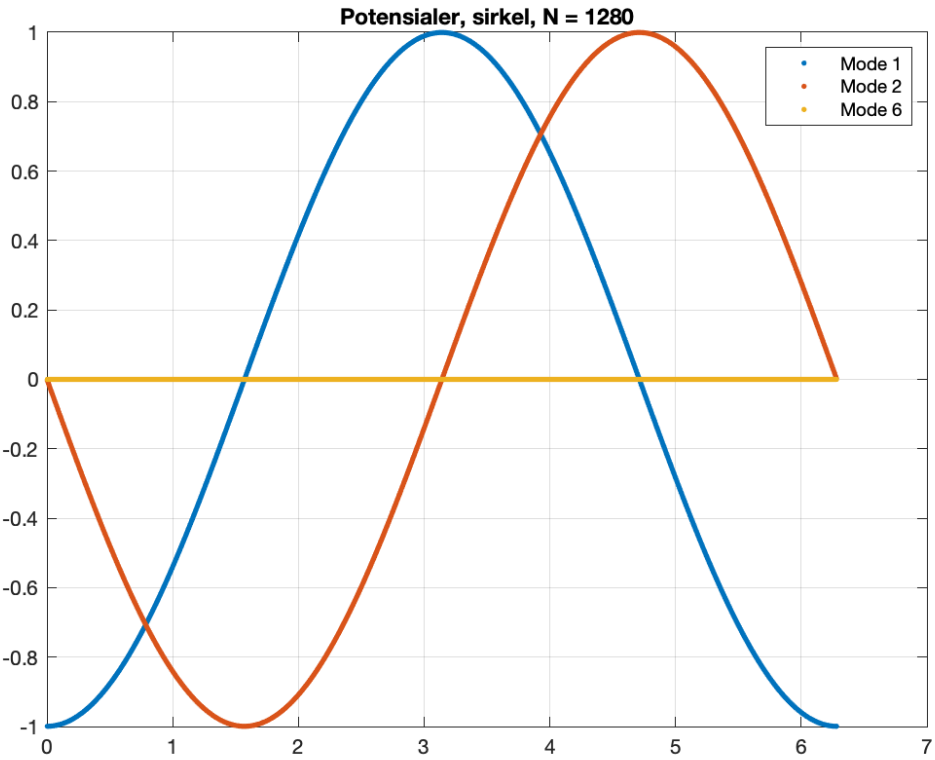

Figure 2

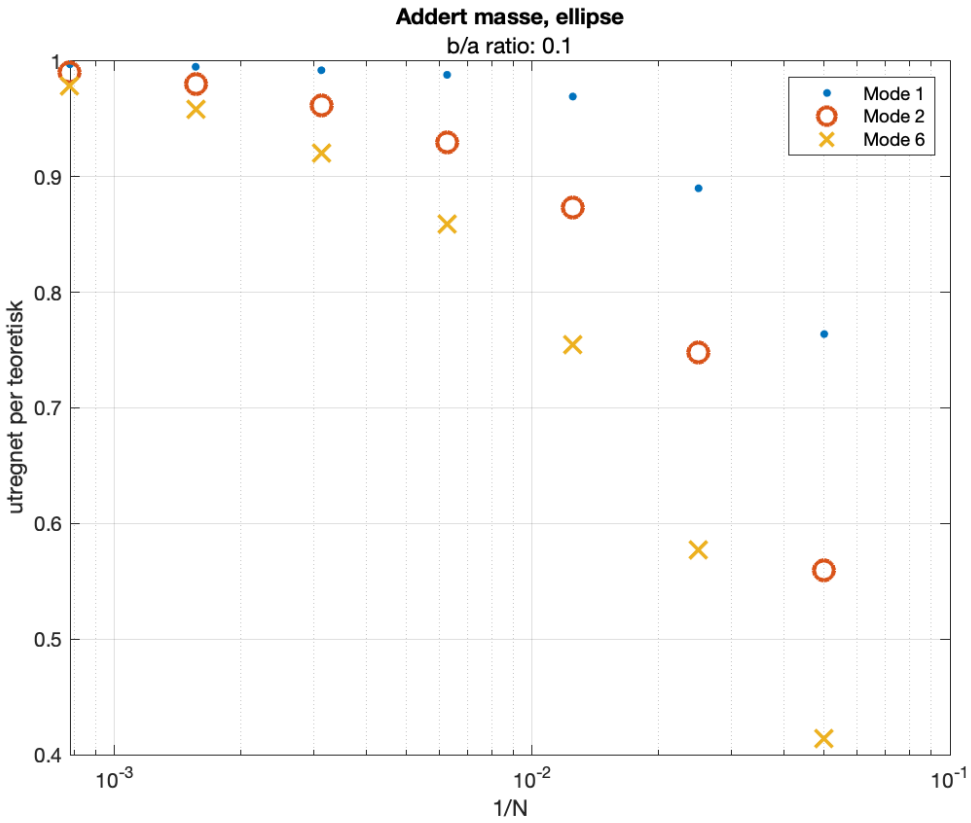

Figure 3

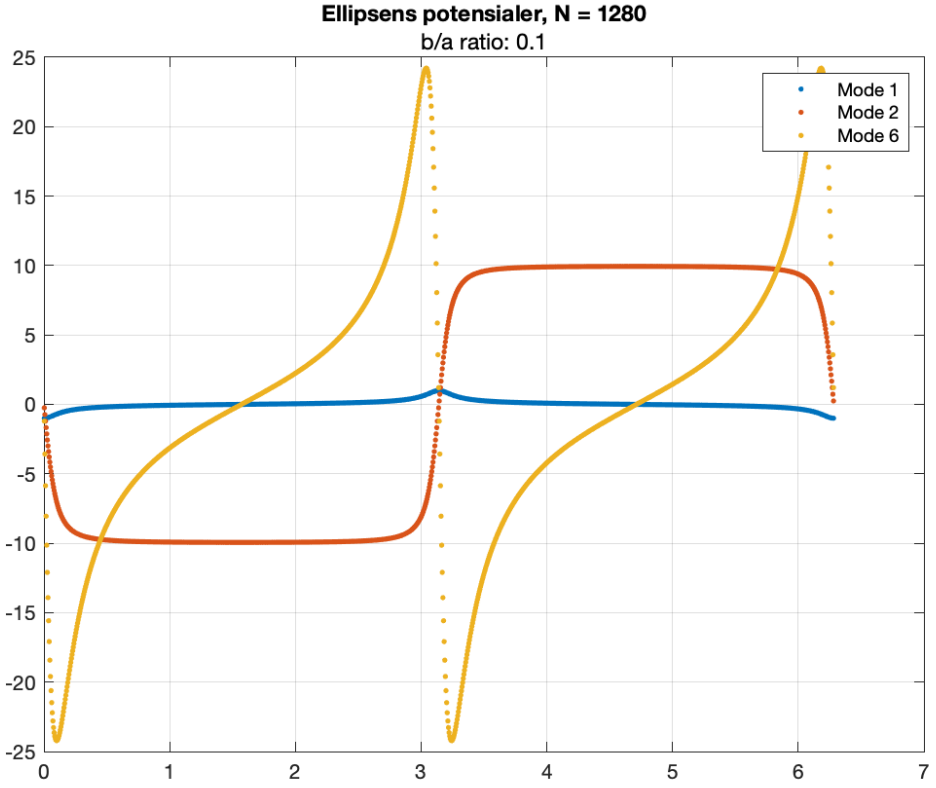

Figure 4

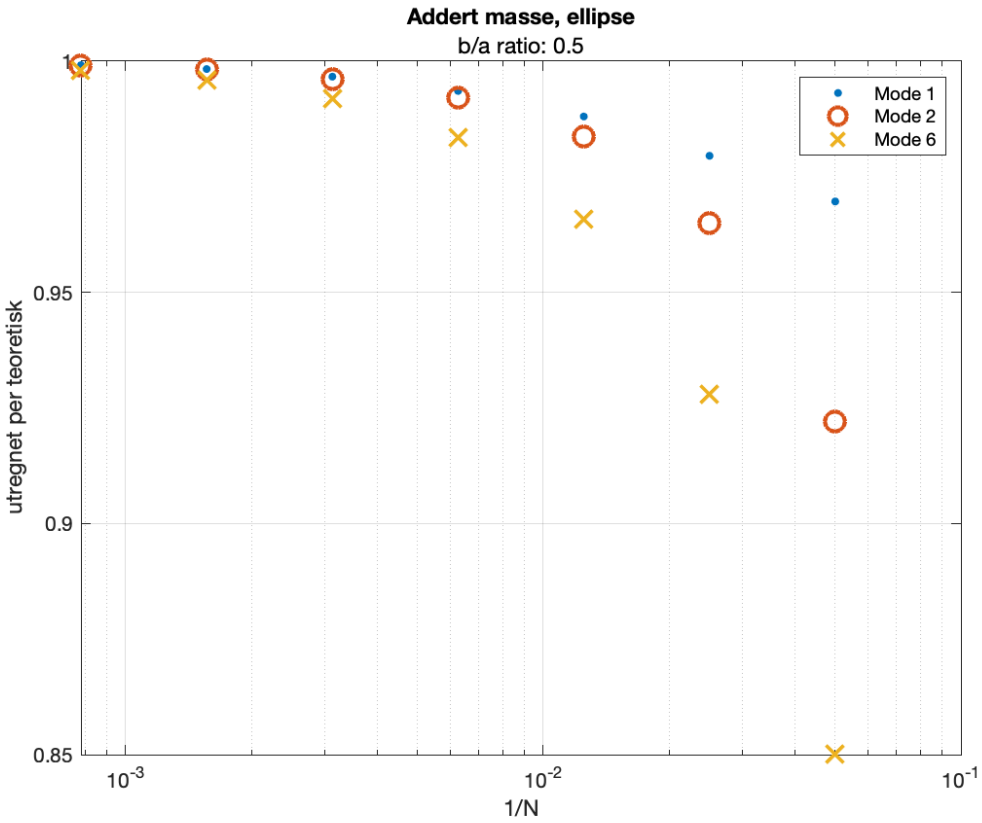

Figure 5

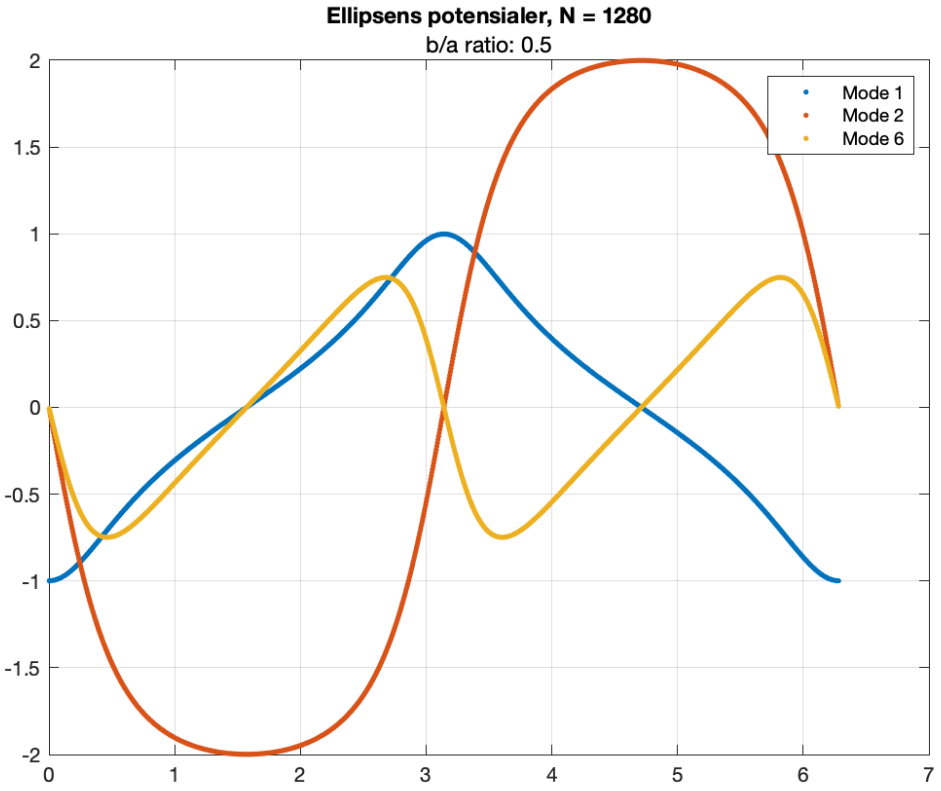

Figure 6

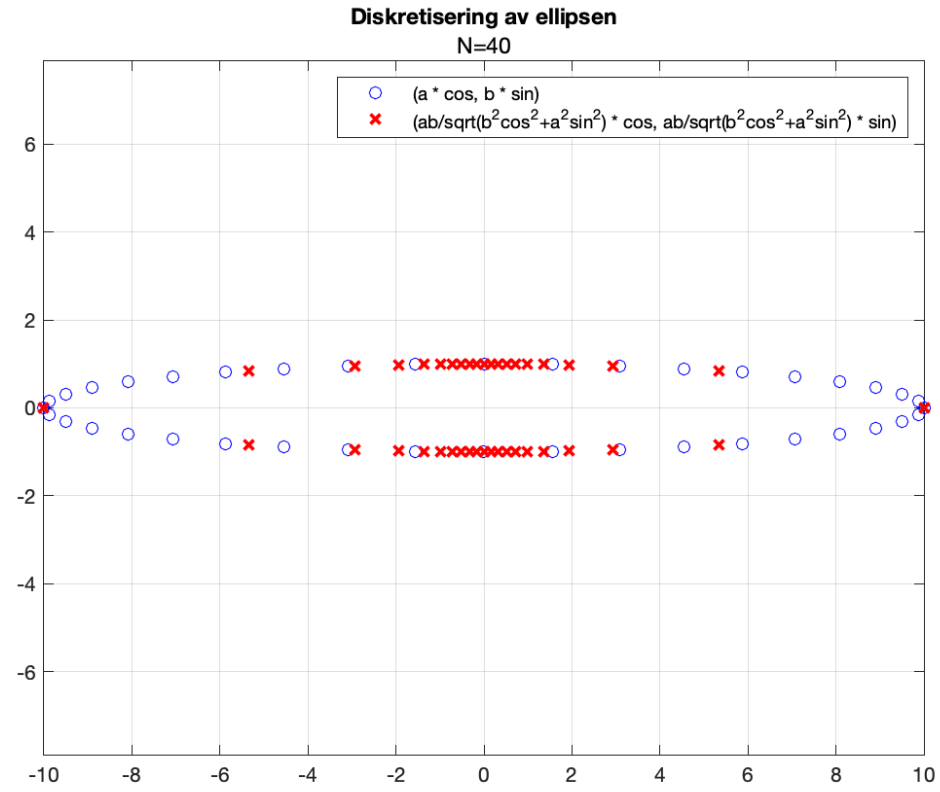

Figure 7: de røde kryssene er fordelingen som er brukt. De blå sirklene er "normal" fordeling

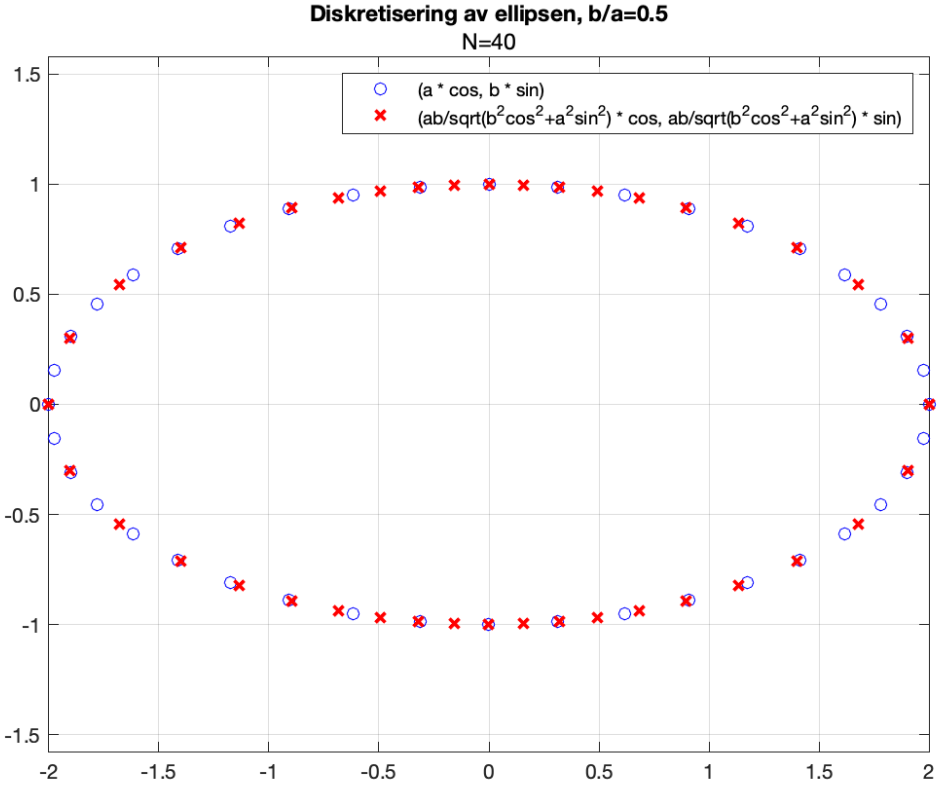

Figure 8

4 Kvadrat

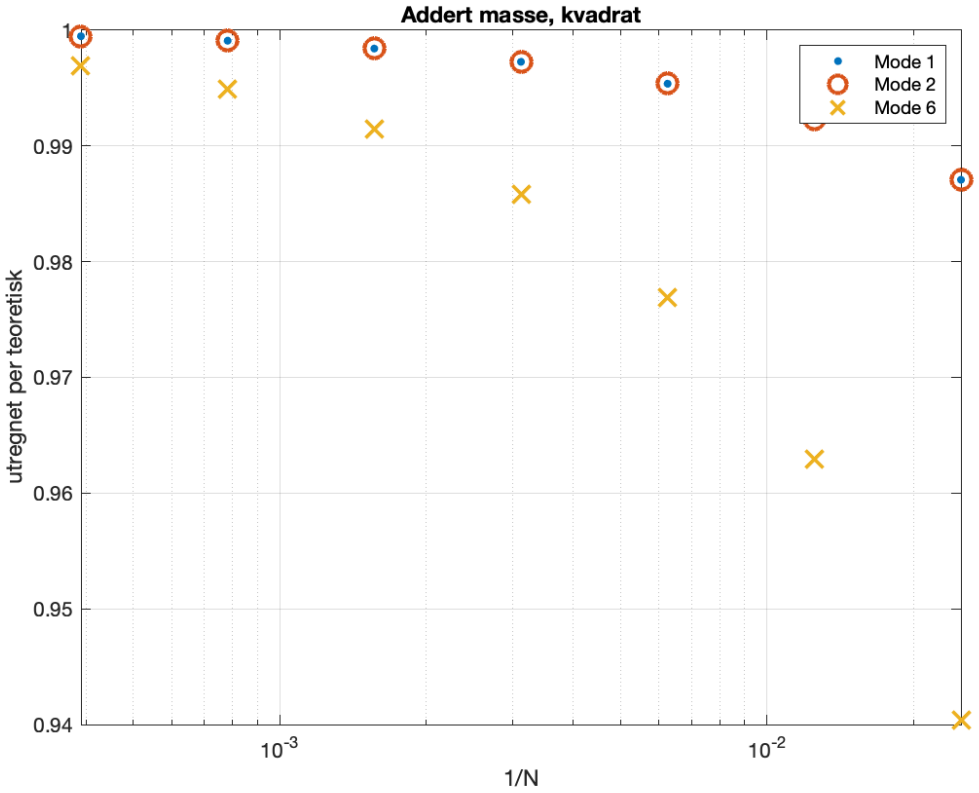

Figure 9

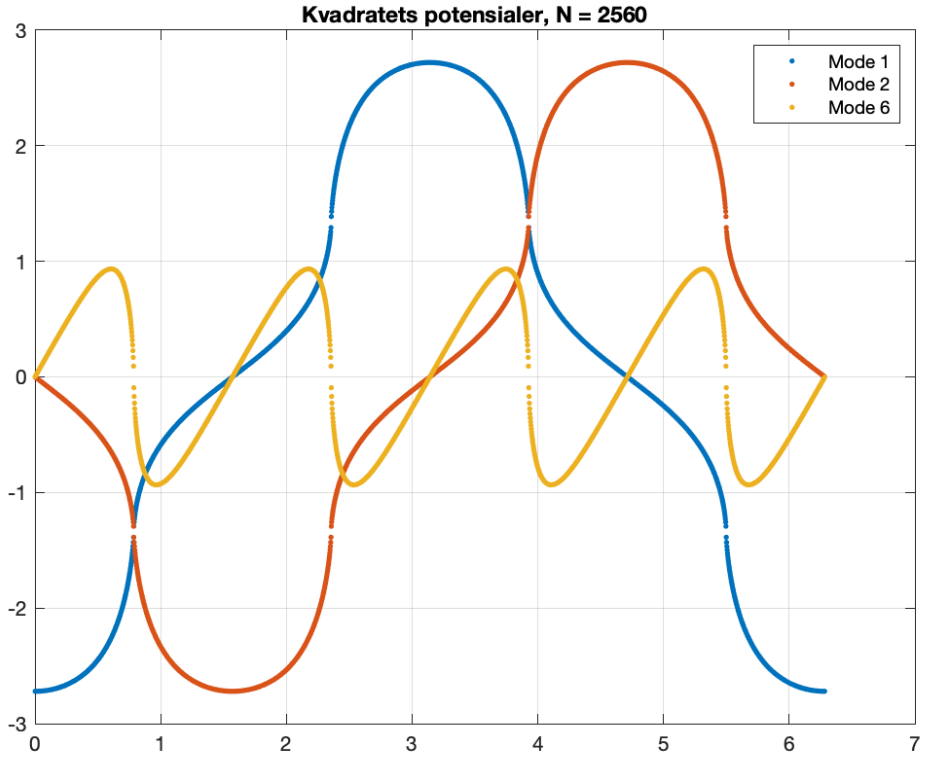

Figure 10