Binding Energy(MeV)

	MT-V	Volkov	ATS3	Minnesota
Numerical	-0.4139	-0.5458	-2.2155	-2.2020
h.o. basis	-0.4179	-0.5458	-2.2155	-2.2020
SVM	-0.4103	-0.5458	-2.2158	-2.2022

rms radii(fm)

	MT-V	Volkov	ATS3	Minnesota
Numerical	4.016	3.595	1.939	1.952
h.o. basis	3.957	3.593	1.939	1.951
SVM	3.795	3.356	1.937	1.950

Radial wave function with MT-V potential
(numerical solution of Schroedinger eq.)
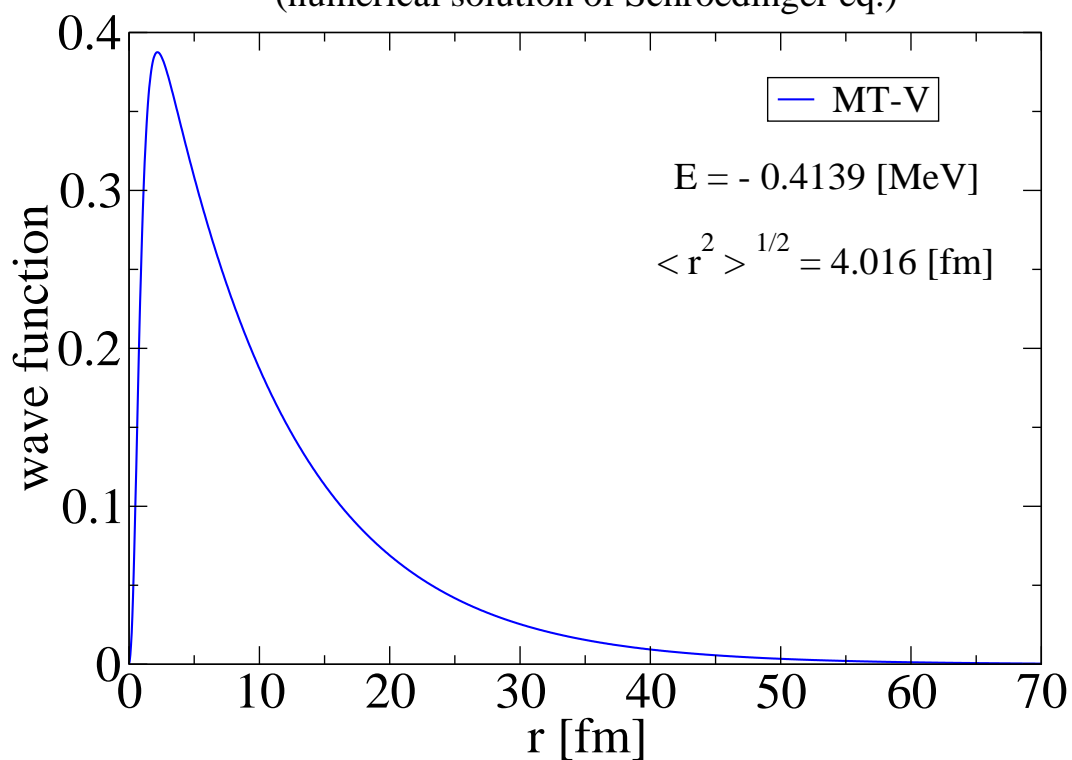
MT-V

$E = -0.4139$ [MeV]

$< r^2 >^{1/2} = 4.016$ [fm]

r [fm]

Radial wave function with Volkov potential
(numerical solution of Schroedinger eq.)

Volkov

$E = -0.5458$ [MeV]

$< r^2 >^{1/2} = 3.595$ [fm]

r [fm]
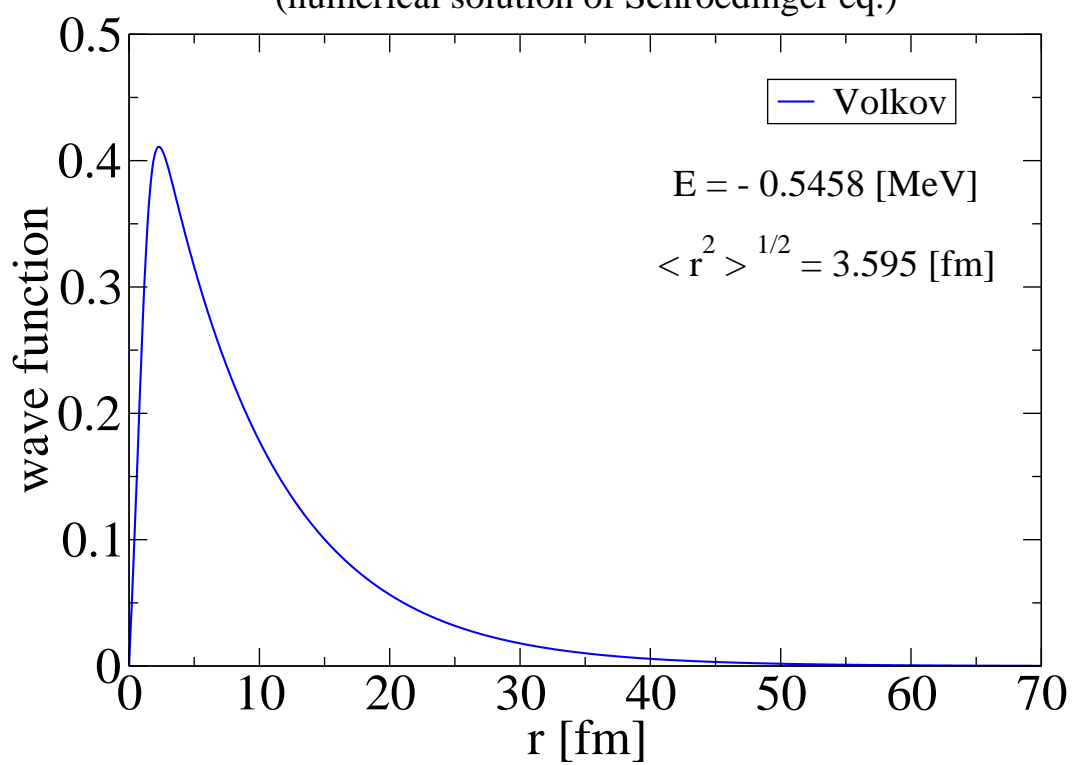
Radial wave function with ATS3 potential
(numerical solution of Schroedinger eq.)

$E = -2.2155$ [MeV]

$< r^2 >^{1/2} = 1.939$ [fm]
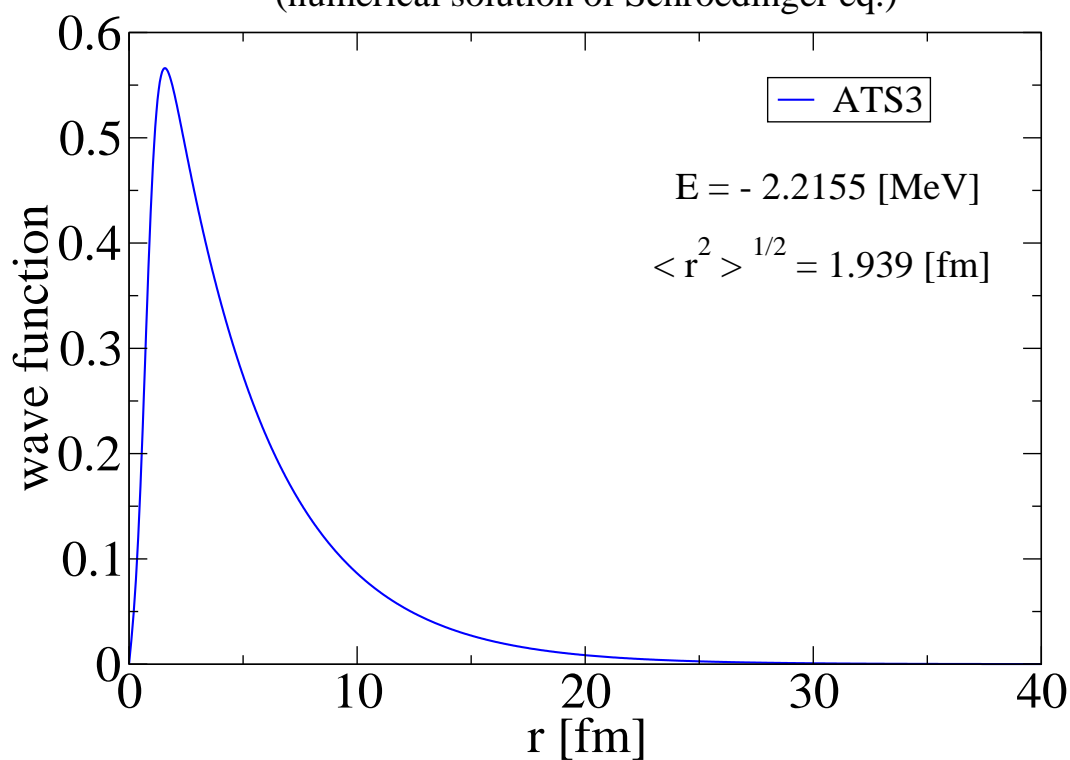
Radial wave function with Minnesota potential
(numerical solution of Schroedinger eq.)

$E = -2.2020$ [MeV]

$< r^2 >^{1/2} = 1.952$ [fm]
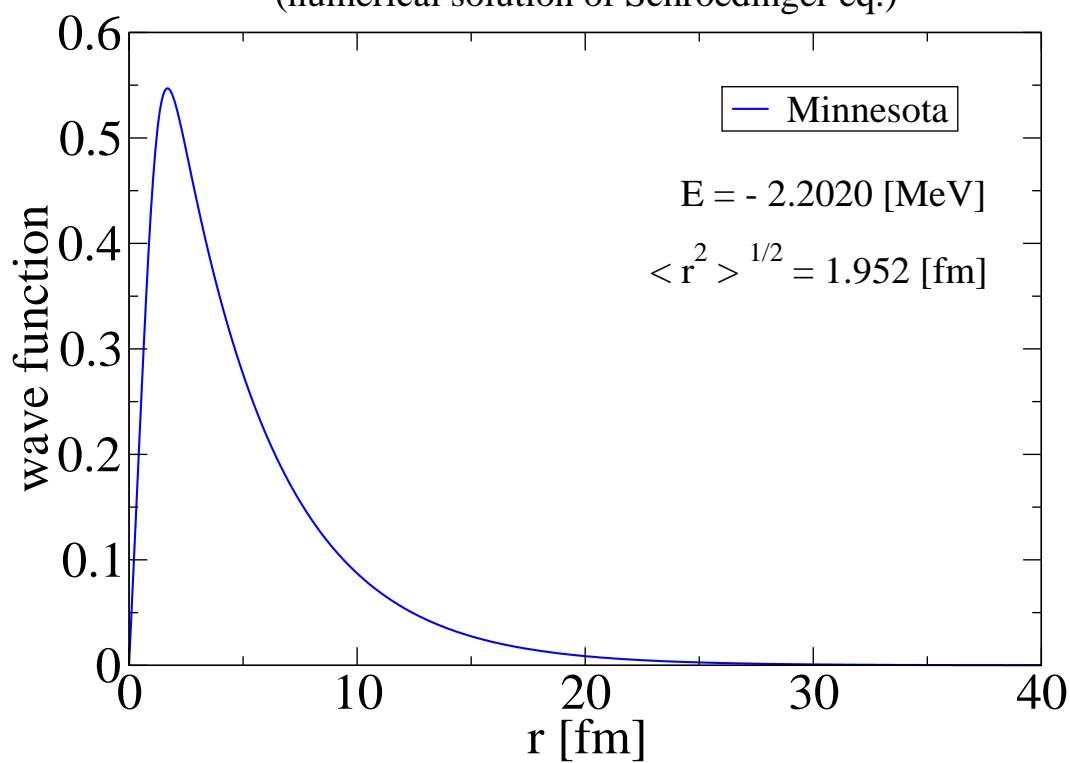
Radial wave functions with MT-V potential
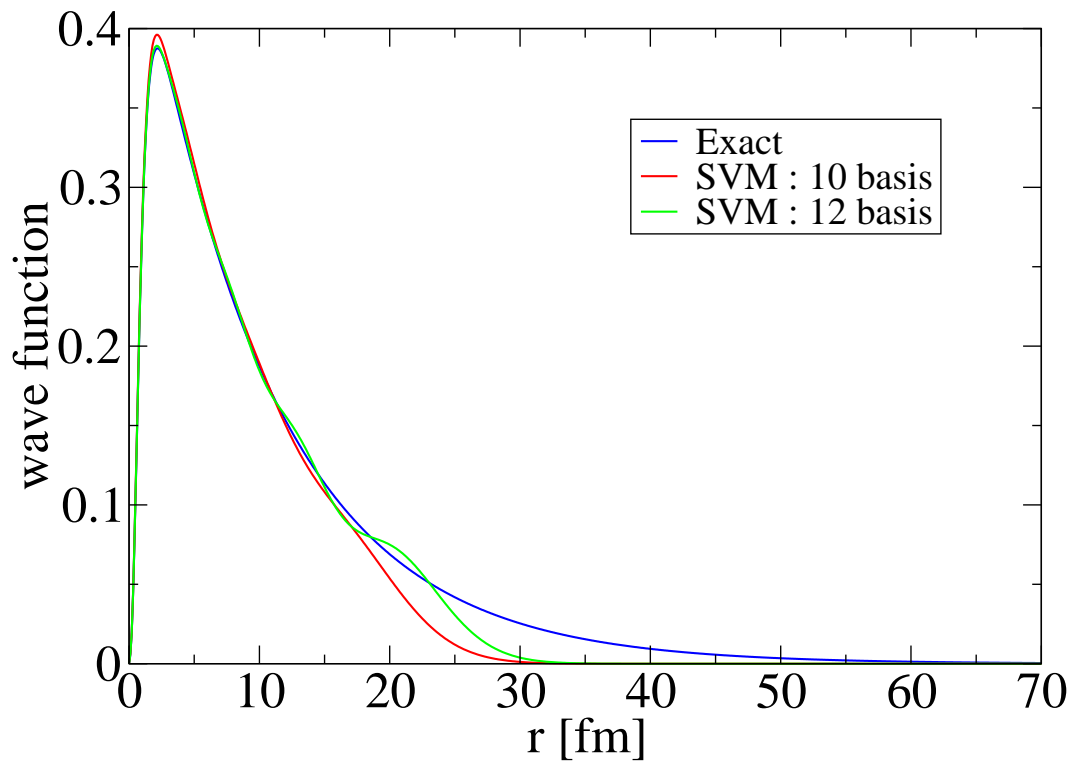
Convergence of the energy
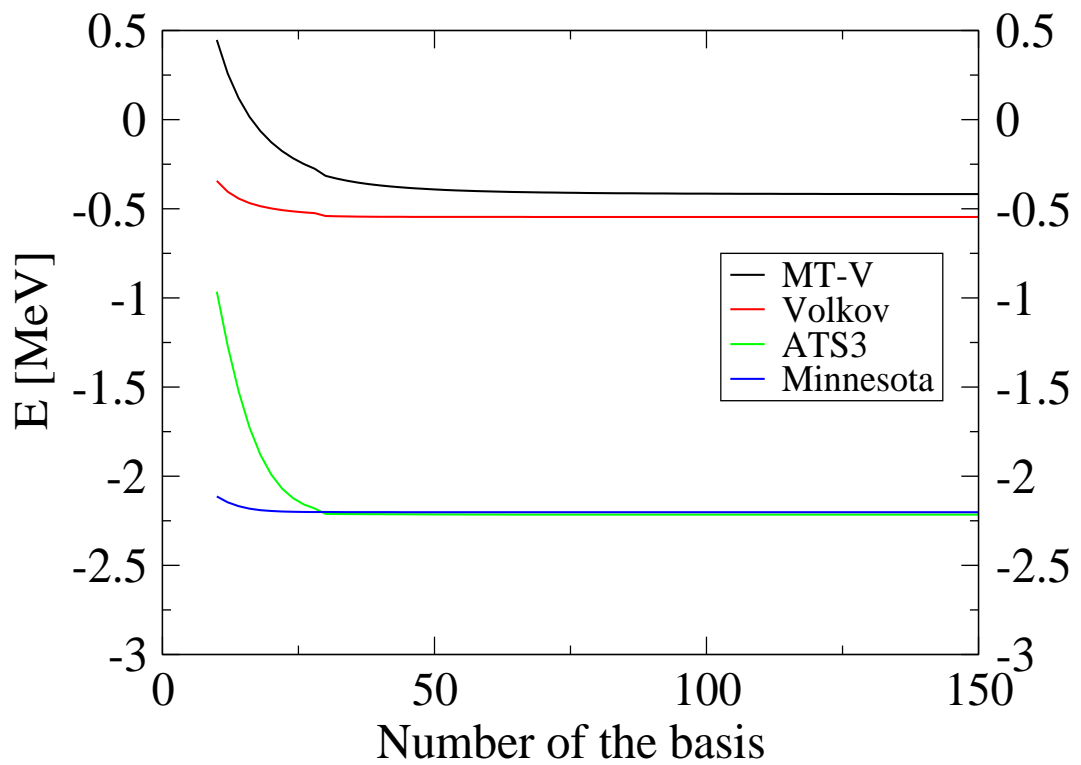
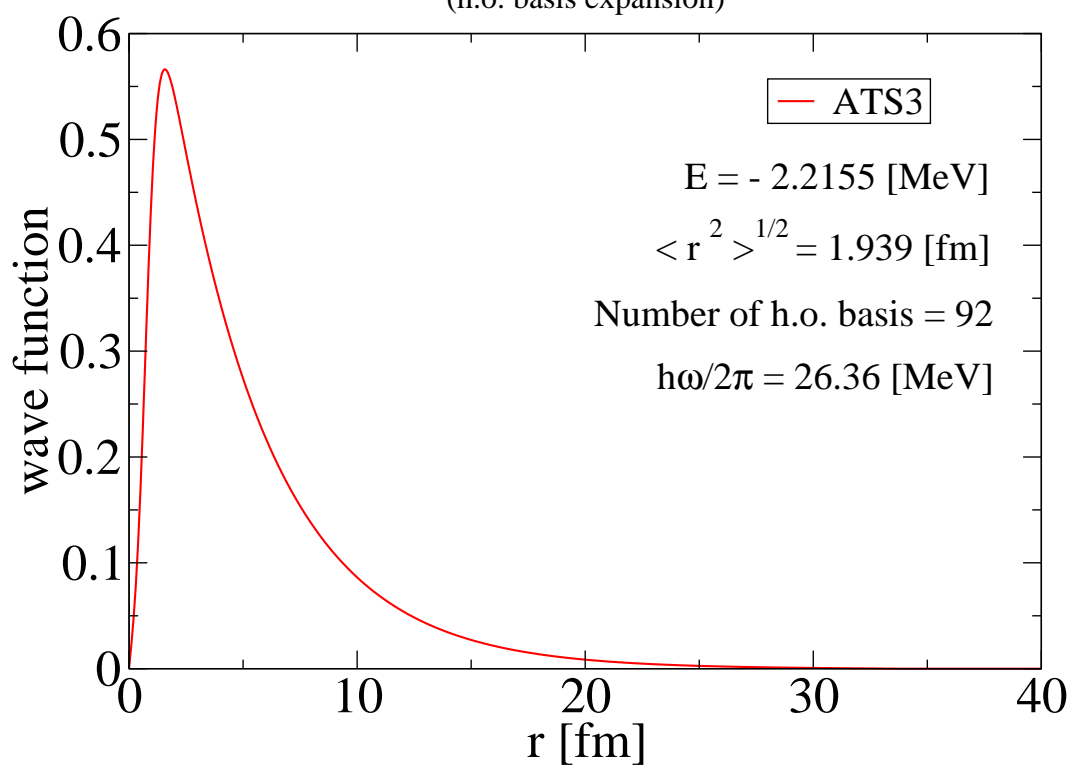## Radial wave function with MT-V potential
(h.o. basis expansion)
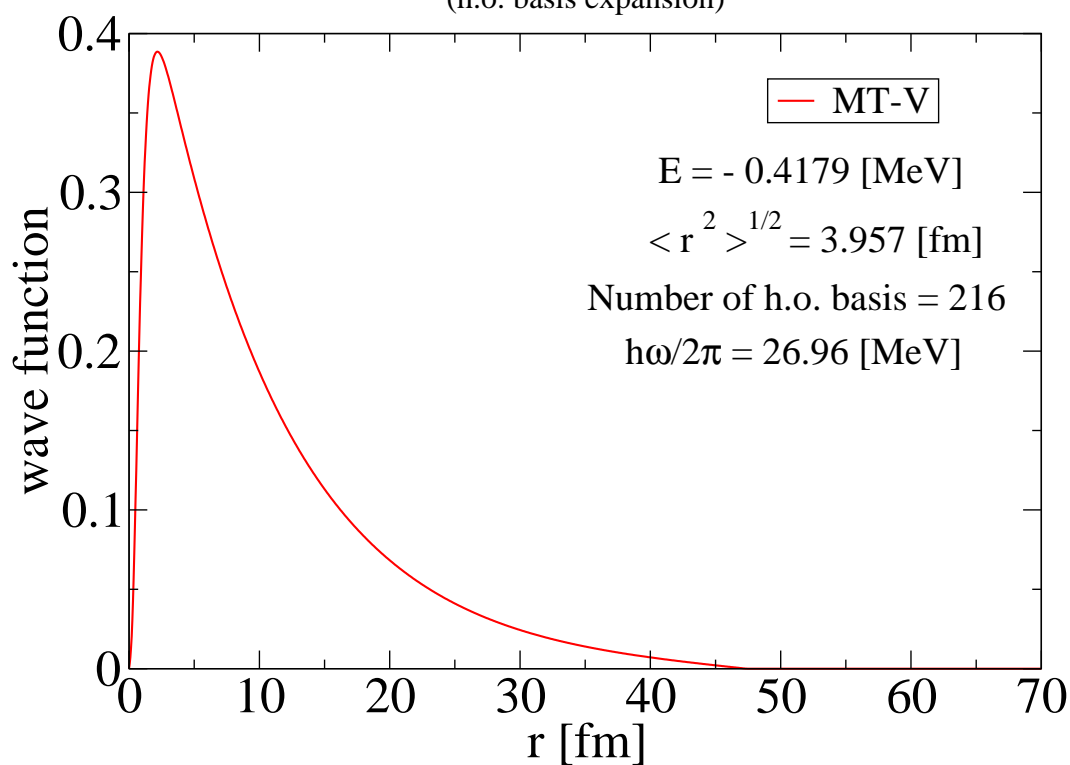
MT-V

$E = -0.4179$ [MeV]

$<r^2>^{1/2} = 3.957$ [fm]

Number of h.o. basis = 216

$\hbar\omega/2\pi = 26.96$ [MeV]

Radial wave function with Volkov potential
(h.o. basis expansion)

Volkov

$E = -0.5458$ [MeV]

$<r^2>^{1/2} = 3.593$ [fm]

Number of h.o. basis = 106

$\hbar\omega/2\pi = 10.0$ [MeV]
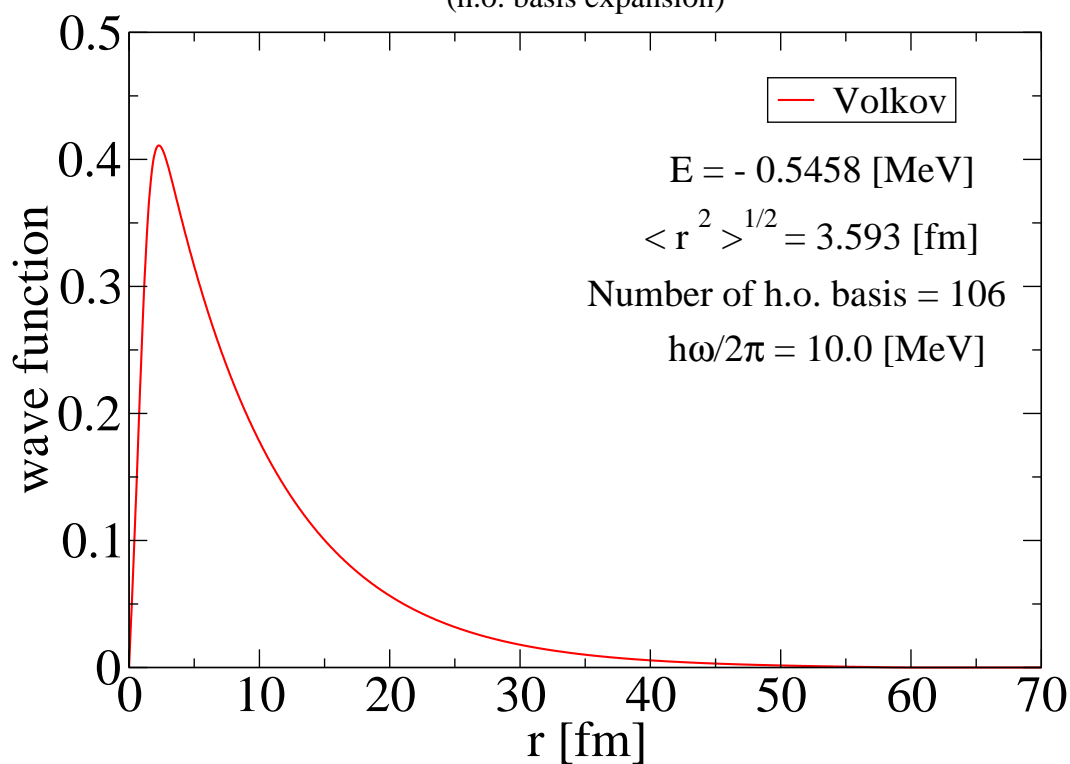
Radial wave function with ATS3 potential
(h.o. basis expansion)

ATS3

$E = -2.2155$ [MeV]

$\langle r^2 \rangle^{1/2} = 1.939$ [fm]

Number of h.o. basis = 92

$\hbar\omega/2\pi = 26.36$ [MeV]

wave function

r [fm]

Radial wave function with Minnesota potential
(h.o. basis expansion)

Minnesota

$E = -2.2020$ [MeV]

$\langle r^2 \rangle^{1/2} = 1.951$ [fm]

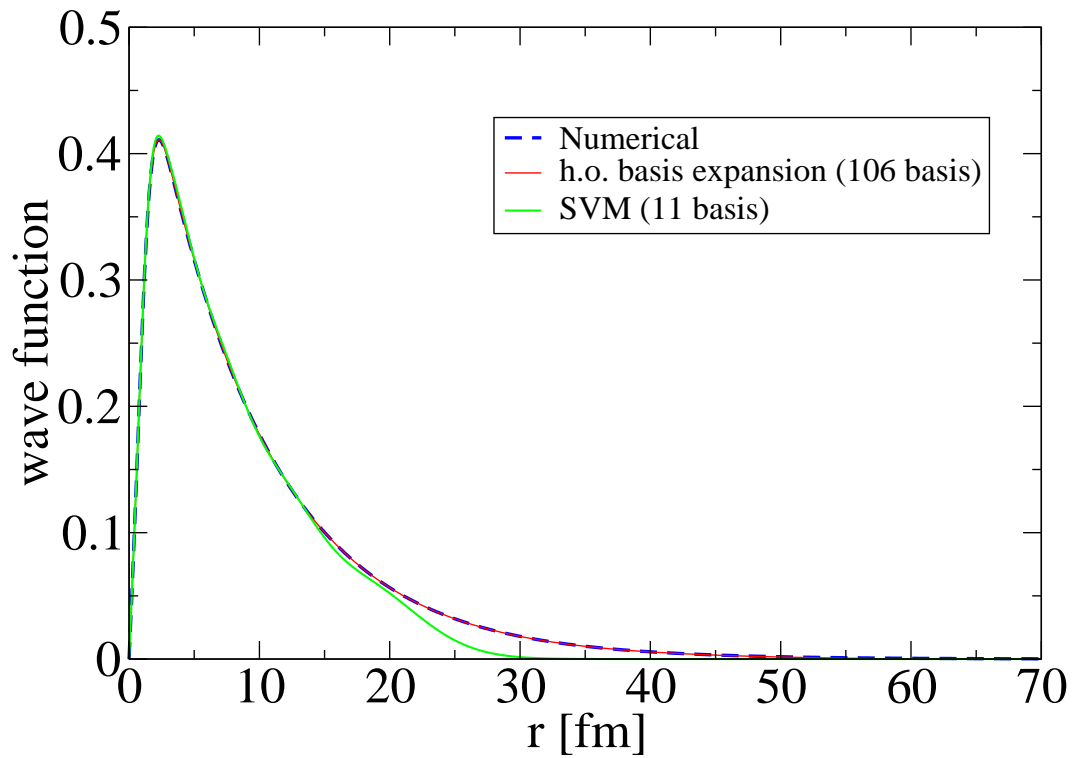Number of h.o. basis = 72

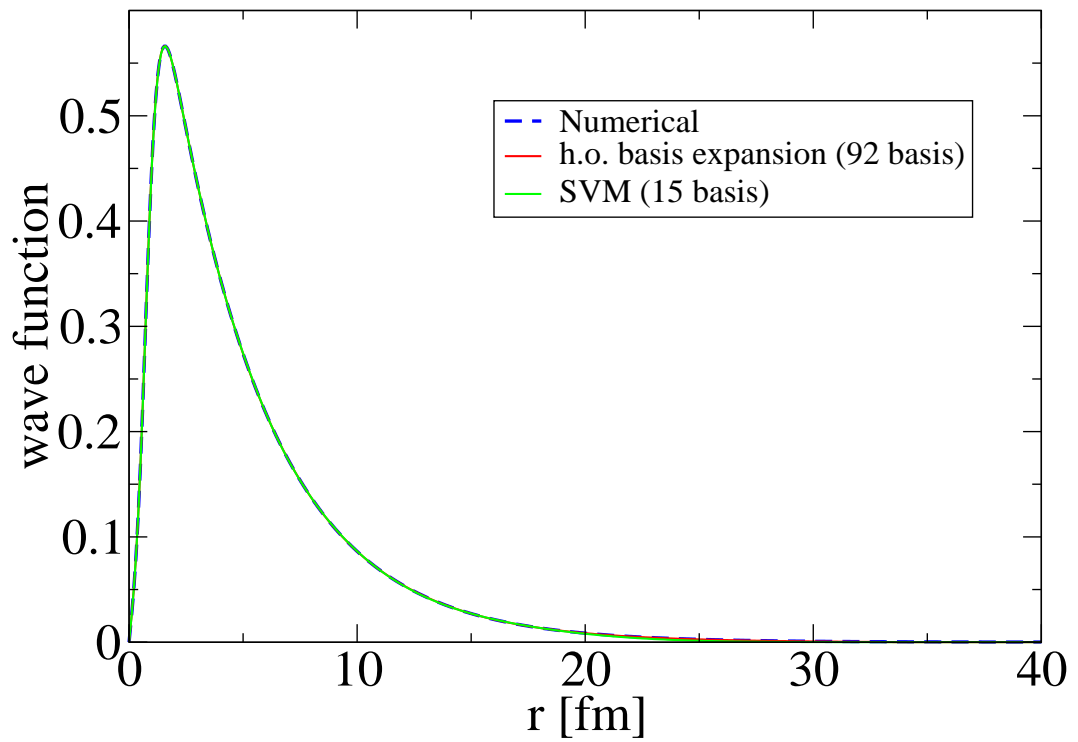$\hbar\omega/2\pi = 25.06$ [MeV]

wave function

r [fm]
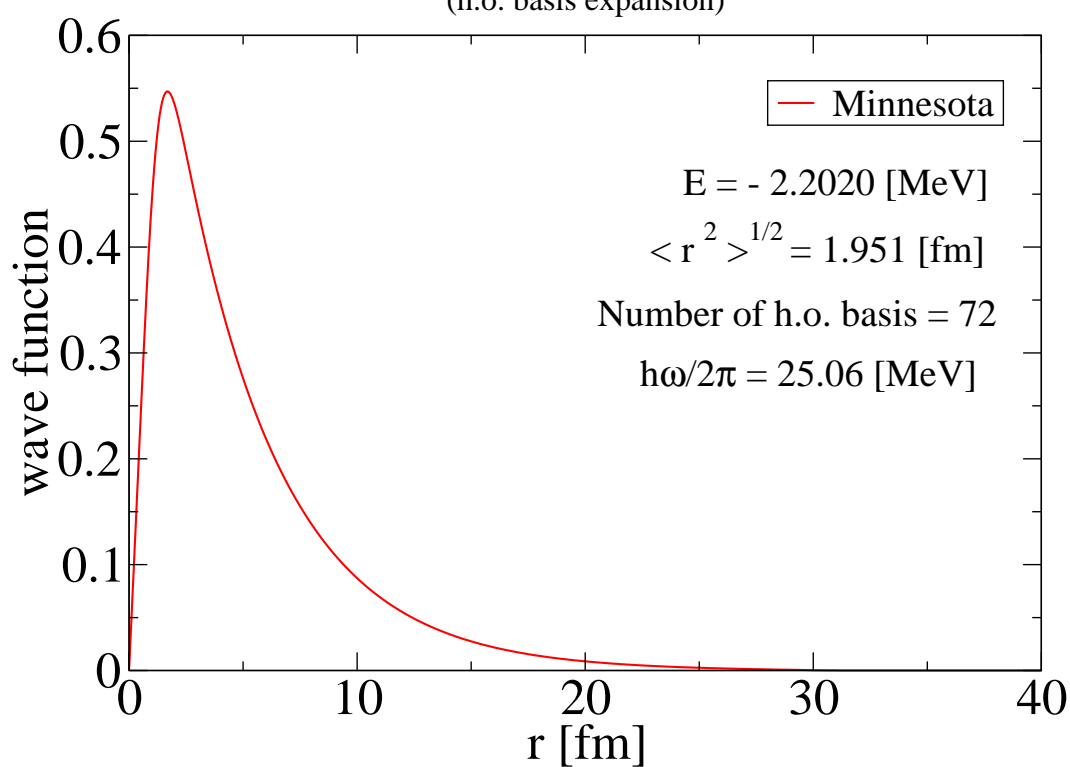
Radial wave functions with MT-V potential
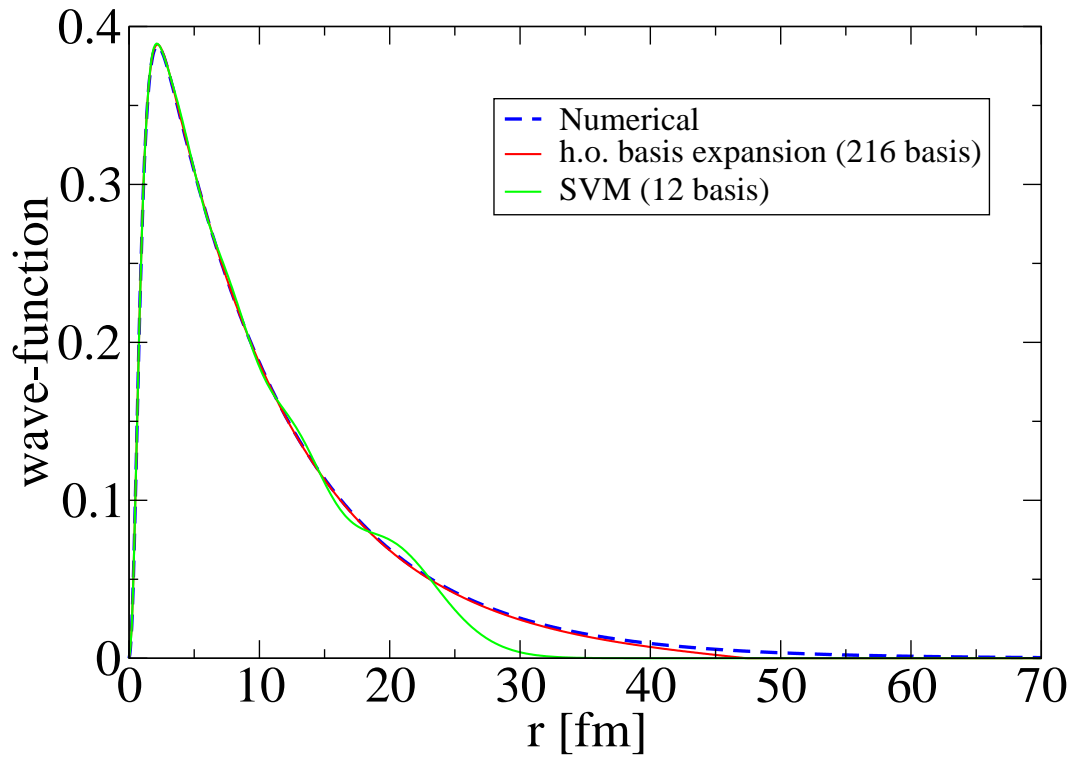
Radial wave functions with Volkov potential

Radial wave functions with ATS3 potential

Radial wave functions with Minnesota potential