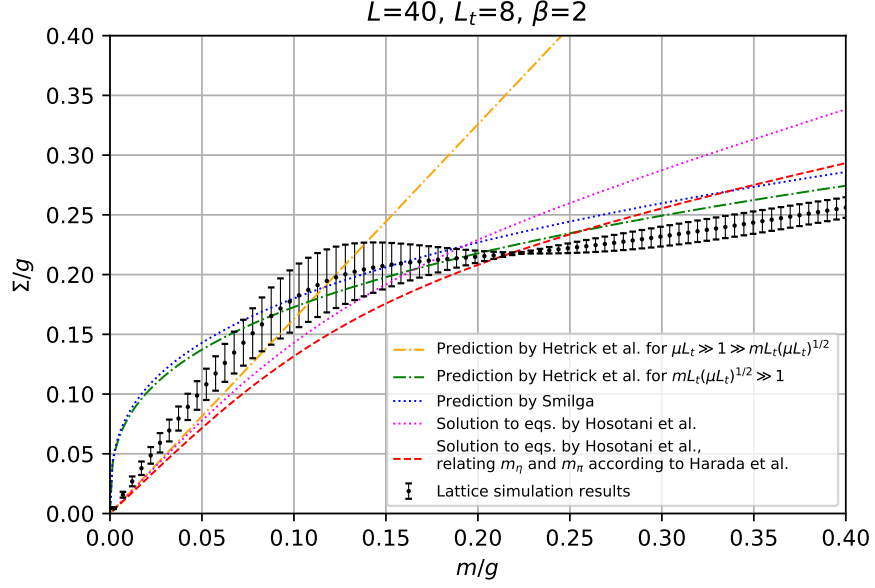


$\langle \bar{\psi} \psi \rangle$ at finite temperature with the overlap operator.

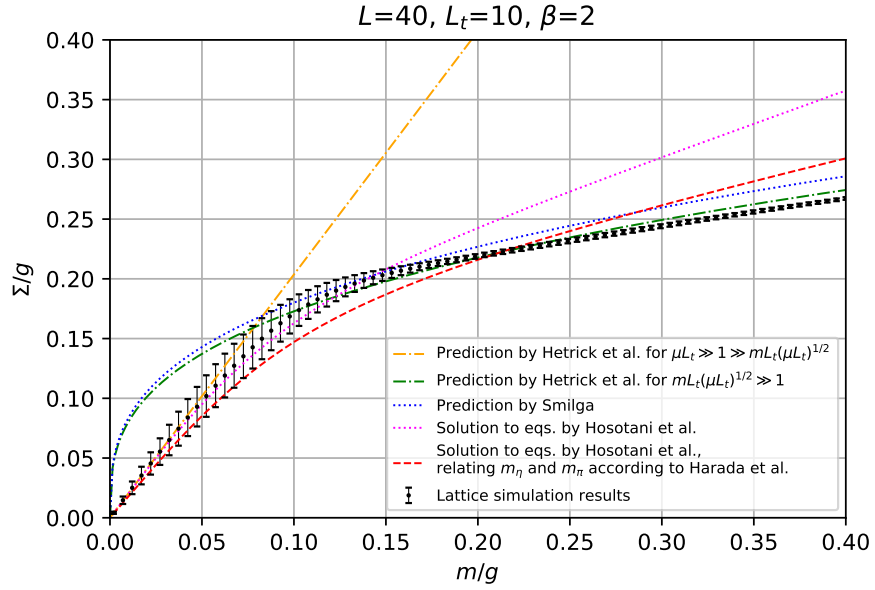
March 10, 2022

1 $\beta = 2$

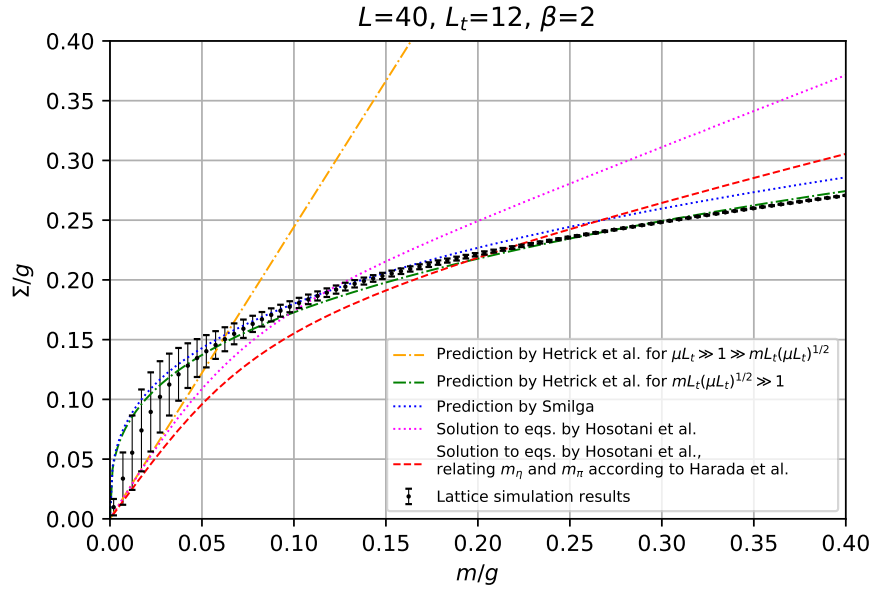
1.1 Lattice vs. equations by Hosotani



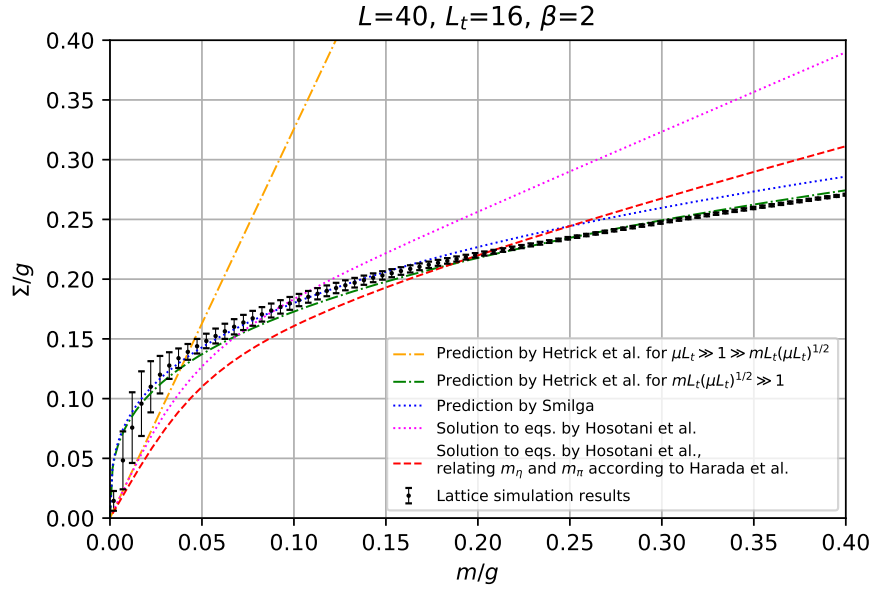
(a) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x8.



(b) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x10.

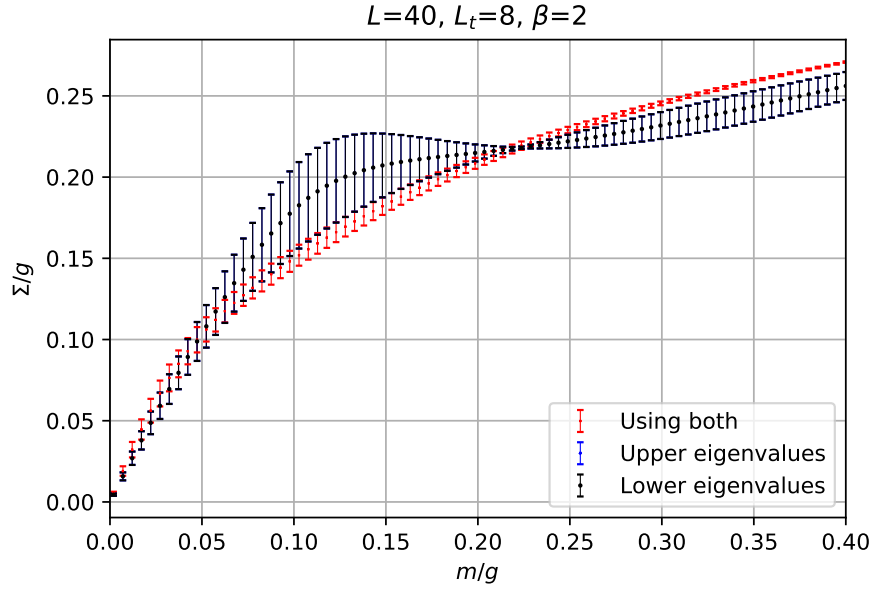


(c) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x12.

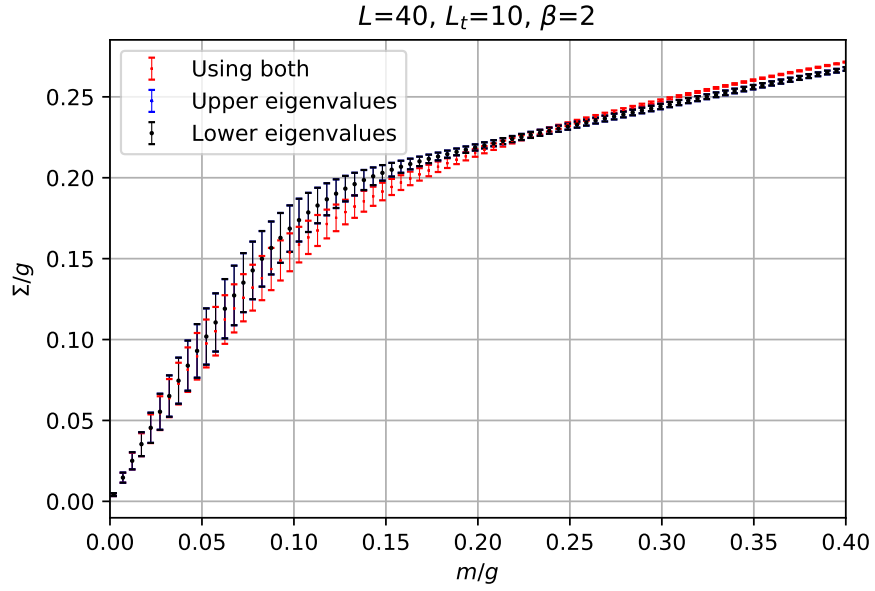


(d) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x16.

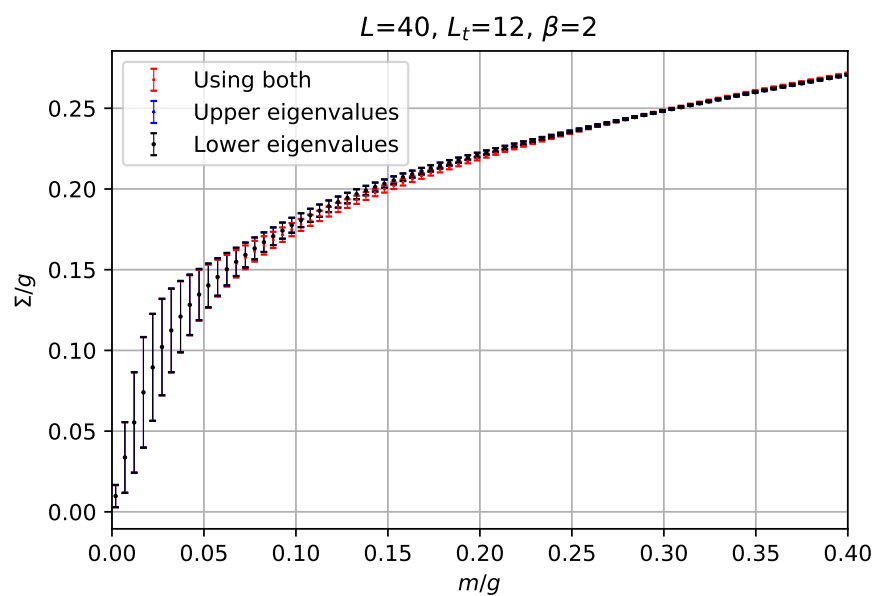
1.2 Comparison of Σ with the lower and upper half plane eigenvalues.



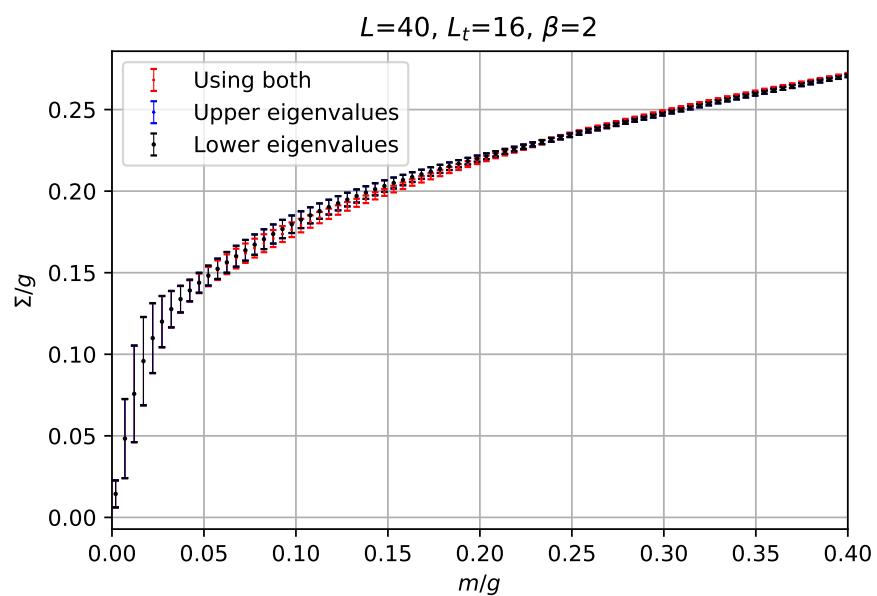
(e) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x8.



(f) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x10.



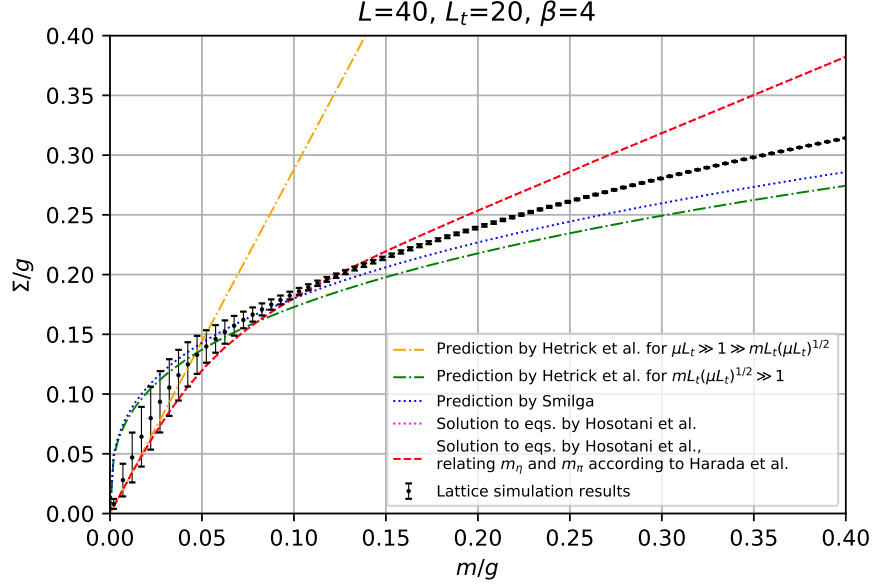
(g) $\langle \bar{\psi} \psi \rangle$ for a lattice of size 40x12.



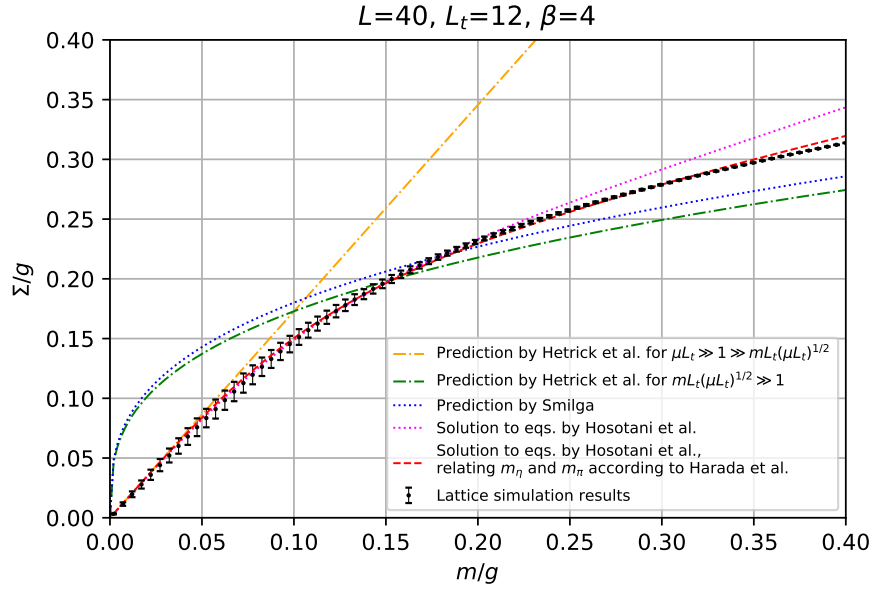
(h) $\langle \bar{\psi} \psi \rangle$ for a lattice of size 40x16

2 $\beta = 4$

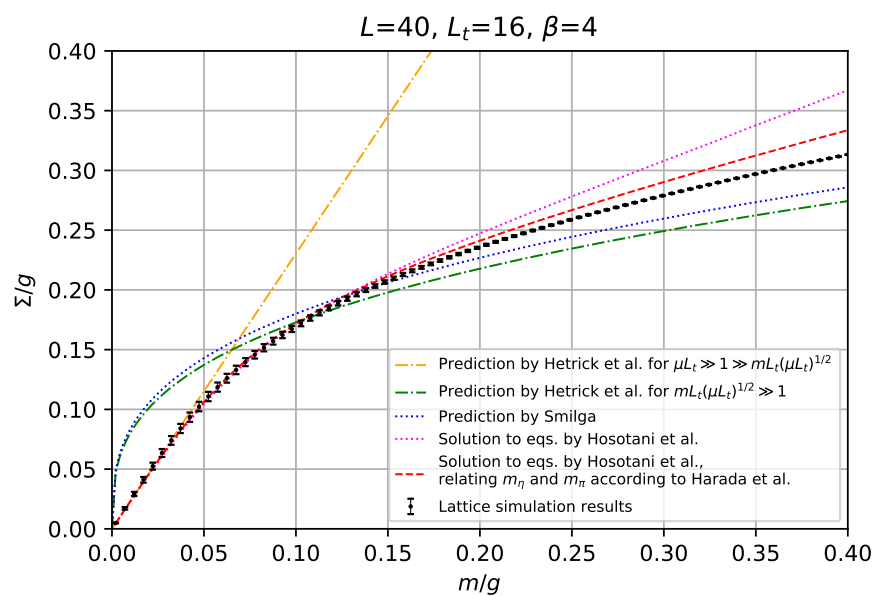
2.1 Lattice vs. equations by Hosotani



(i) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x20.

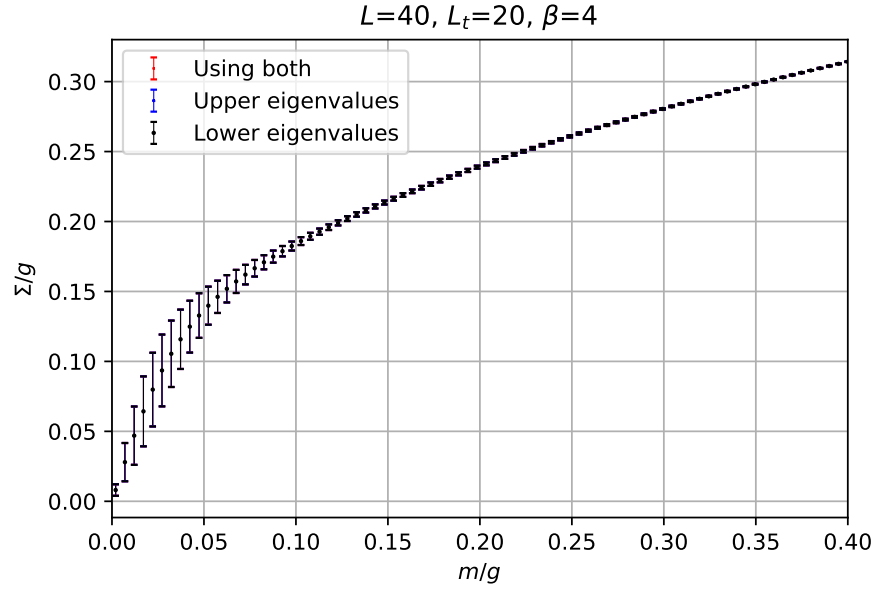


(j) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x12.

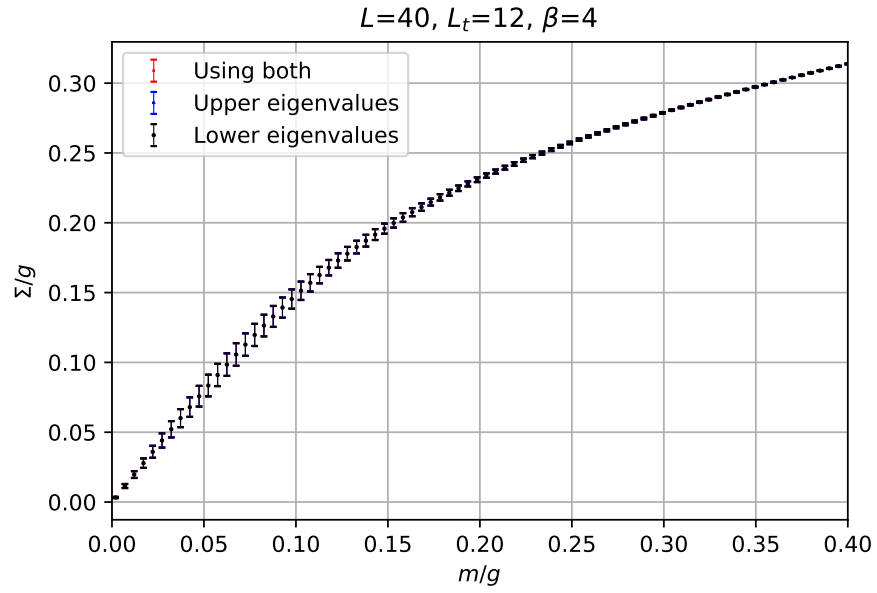


(k) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x16.

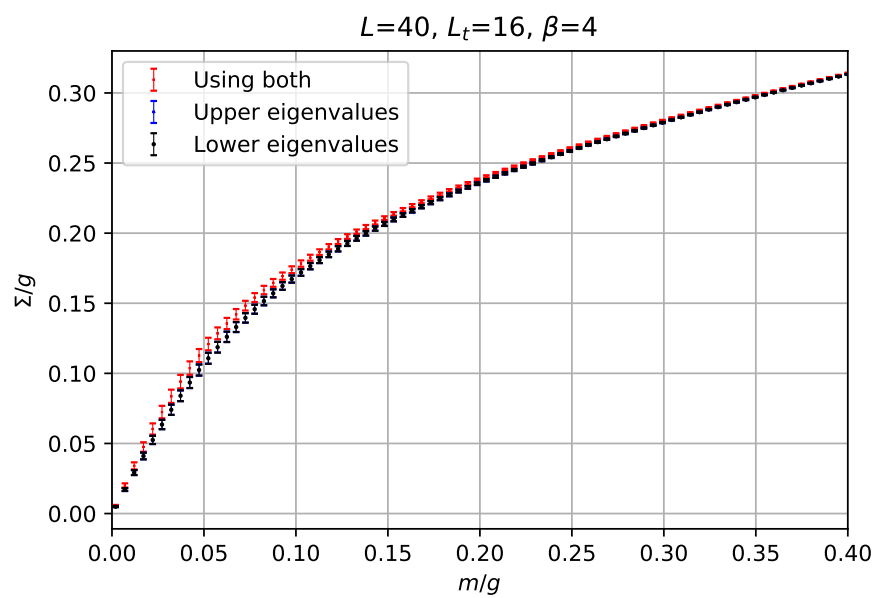
2.2 Comparison of Σ with the lower and upper half plane eigenvalues.



(l) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x20.



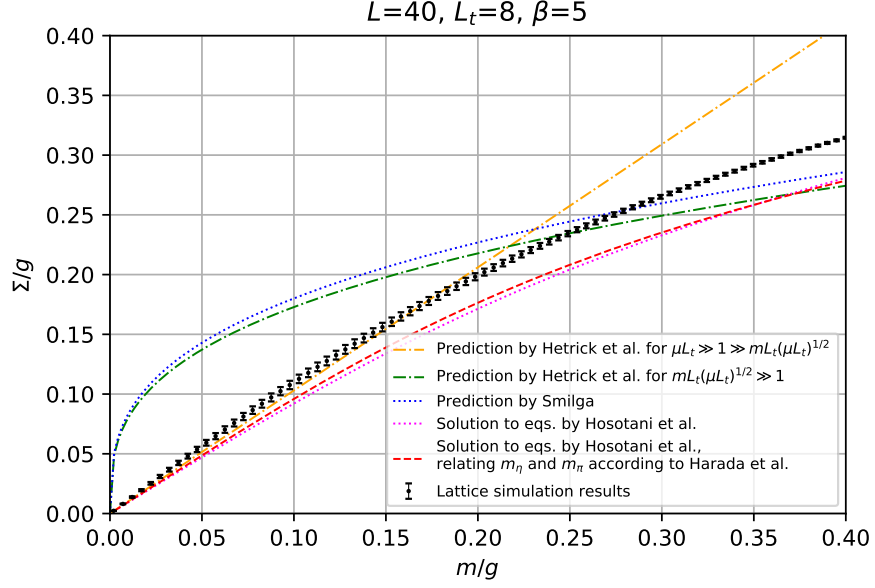
(m) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x12.



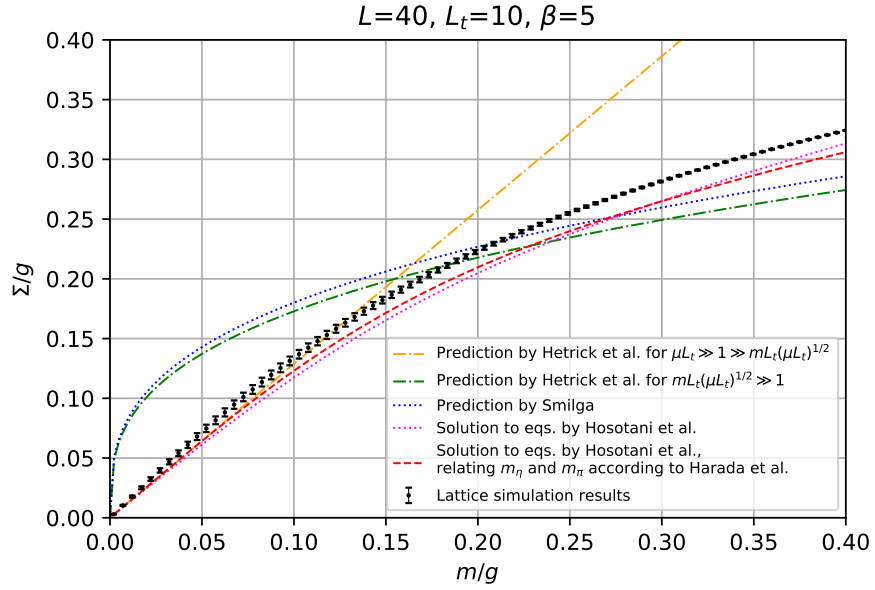
(n) $\langle \bar{\psi} \psi \rangle$ for a lattice of size 40x16.

3 $\beta = 5$

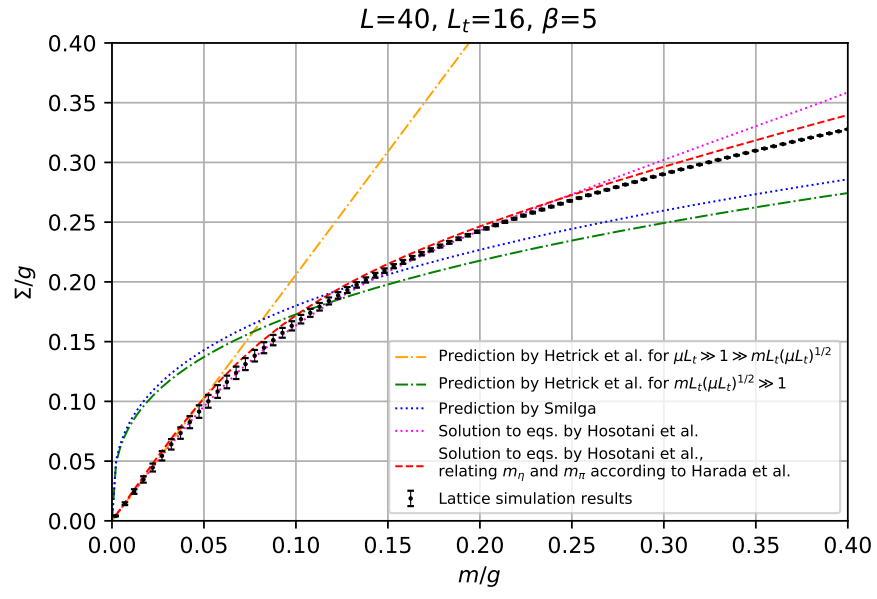
3.1 Lattice vs. equations by Hosotani



(o) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x8.

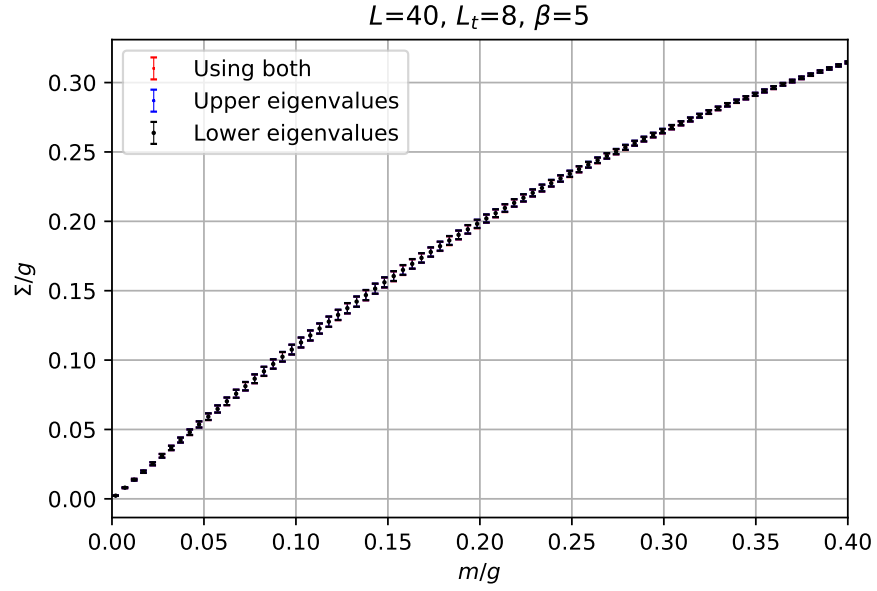


(p) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x10.

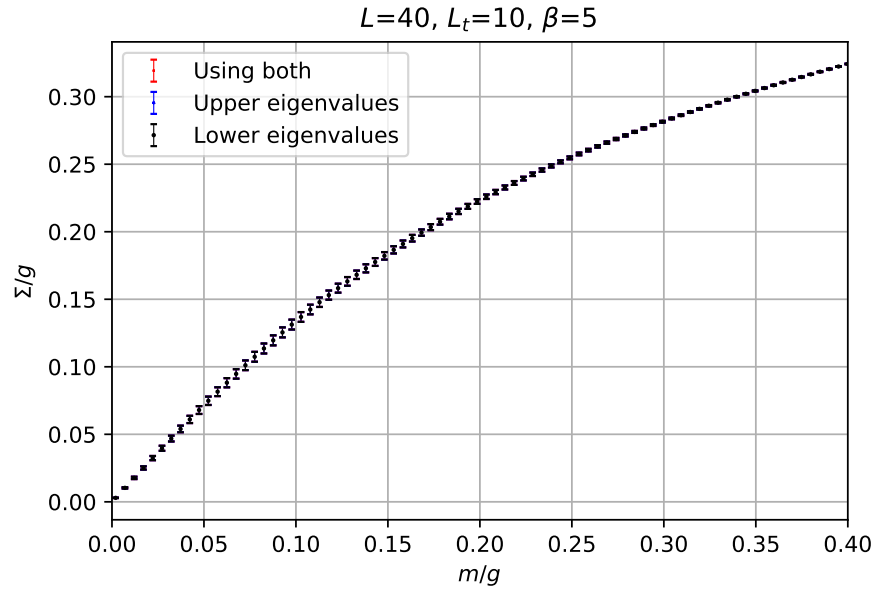


(q) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x16.

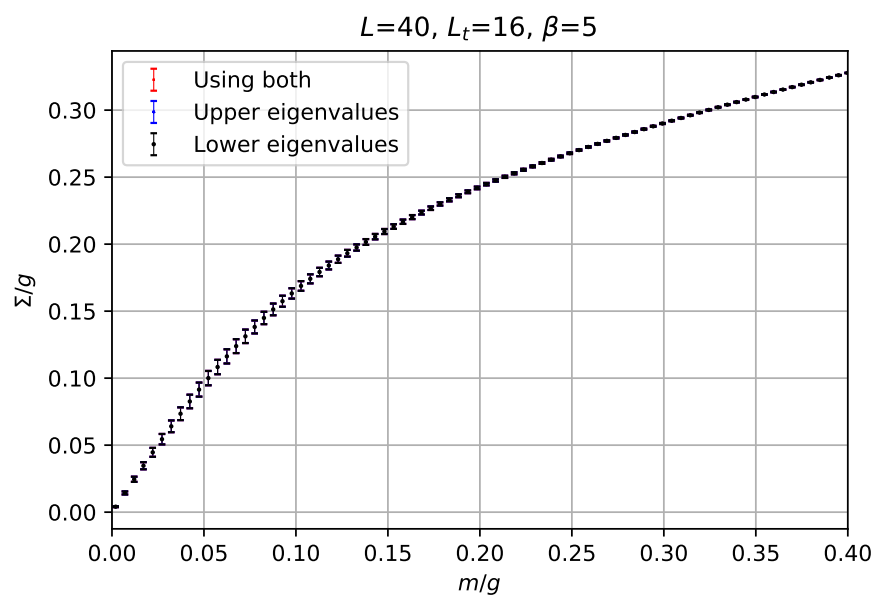
3.2 Comparison of Σ with the lower and upper half plane eigenvalues.



(r) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x8.



(s) $\langle \bar{\psi}\psi \rangle$ for a lattice of size 40x10.



(t) $\langle \bar{\psi} \psi \rangle$ for a lattice of size 40x16.